

THE
INTRODUCTORY DISCOURSE,
AND THE
LECTURES
DELIVERED BEFORE THE
AMERICAN INSTITUTE OF INSTRUCTION,
AT
SPRINGFIELD, (MASS.) AUGUST, 1839.
INCLUDING
THE JOURNAL OF PROCEEDINGS,
AND
A LIST OF THE OFFICERS.

PUBLISHED UNDER THE DIRECTION OF THE BOARD OF CENSORS.

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JOURNAL OF PROCEEDINGS.

TENTH ANNUAL SESSION.

Springfield, Town Hall, Aug. 22, 1839.

At half past 8 o'clock, the meeting was called to order by the President, Mr. CALHOUN.

The Secretary read the record of last year's proceedings.

Mr. H. W. Carter, of Boston, was appointed Treasurer, pro tem. Mr. Ticknor being absent.

The Institute then proceeded to appoint Committees, viz.

To seat ladies and strangers.

Messrs. Dillaway and Thayer, of Boston, and James, of Philadelphia.

To nominate officers.

Messrs. F. Emerson, Thayer, Mackintosh, and Pettes, of Boston, Kingsbury and Bishop, of Providence, and Clark, of Springfield.

The Secretary then read the Constitution, according to a vote of the Institute.

The President gave notice that the Constitution was open for signatures, and that the Treasurer was ready to receive the annual subscriptions.

Messrs. Pettes, Mackintosh, and Dillaway, were appointed a Committee, to take into consideration certain portions of the Constitution, with a view to their alteration, to meet the convenience of the Institute in regard to its times and places of meeting.

On motion of Mr. F. Emerson, it was

Ordered, That a Committee be appointed to invite the venerable Dr. NOAH WEBSTER, to attend the meetings of the present session of the Institute, to introduce him and request from him the favor of a lecture, or of any remarks relative to the objects of the Institute.

Messrs. Emerson, Mann and Dillaway, were appointed.

Messrs. Hooker, Beach and Bolles, of Springfield, were appointed a Committee to report for the papers.

It was *Voted*, That 8½, 2½ and 7½ o'clock, be the hours of meeting for business during this session.

At 10 o'clock, the Institute adjourned to the Rev. Mr. Peabody's church, and after prayers by Rev. Mr. Peabody, the Introductory Address was delivered by ROBERT RANTOUL, JR. Esq., of Boston, Mass., on "The Education of a Free People."

Adjourned.

Town Hall. Afternoon.

The President having called the meeting to order, Mr. Pettes offered some resolutions on the subject of the National Convention proposed to be held at Philadelphia.

The President giving notice that he had received a communication from one of the managers of that Convention, the whole subject was referred to a special Committee; viz. Messrs. Pettes, Clark, and Mackintosh.

Mr. Emerson, from the Committee to wait on Dr. Webster, reported that the Committee, on inquiry, had ascertained that Dr. W. had left town, whereupon the Committee were discharged from all further duty on the subject.

At 3 o'clock, a Lecture was delivered by Mr. H. FULLER, of Providence, on "School Libraries."

A recess of ten minutes was then taken, after which the Institute adjourned to the church, as a more comfortable place of hearing the next Lecture, which was delivered by Dr. J. G. METCALF, of Mendon, on "The Physiology of the Skin."

On the return of the Institute to the Hall, the President stated that the education of the children of Irish laborers on our railroads, was a subject to which it was intended to call the attention of the Institute.

On motion of Mr. Emerson, it was

Voted, That Dr. Noah Webster be made an honorary member of the Institute, also that the President communicate this vote to him, together with that passed this morning, inviting his attendance at our meetings during the session of the Institute.

It was *Voted*, That members limit the time of speaking to fifteen minutes at one time, unless by special vote.

Suggestions were made by several gentlemen, in regard to proper subjects of discussion, all of which were referred to the Committee of Arrangements.

Adjourned.

Evening.

The meeting having been called to order by the President, Mr. Thayer offered the following resolution; *Resolved*, by the American Institute of Instruction, that the establishment of Normal Schools in this Commonwealth, receives their hearty approval, and should have the countenance and support of every friend of education.

The resolution was discussed by Messrs. Thayer, Carter and Pettes, of Boston, Miles, of Lowell, Dr. Osgood, of Springfield, Greenleaf, of Brooklyn, N. Y., Mack, of Cambridge, James, of Philadelphia, F. Emerson and Mann, of Boston, and passed almost unanimously.

The following question was proposed for to-morrow evening;

What practical means can be resorted to for the education of the children of emigrants?

On motion of Mr. Mann, it was

Voted, That the intervals after the lectures, be devoted to discussing the subject matter of those lectures, unless otherwise ordered.

Voted, To hold the meetings and hear the lectures in future, at the Unitarian church.

Adjourned.

Friday, Aug. 23.

The President having taken the chair, and the records having been read, Mr. Emerson, from the nominating Committee, reported a list of names to be ballotted upon by the Institute.

At 10 o'clock, a Lecture was delivered by REV. EMERSON DAVIS, of Westfield, Mass., on "Mind and its Developments."

After a short interval, during which remarks were made by Messrs. Thayer, Pettes and Carter, the next Lecture was given by MR. LUTHER B. LINCOLN, of Deerfield, on "The Cultivation of a Classic Taste, in Schools."

After the Lecture, some remarks were made upon some of the topics touched upon it, by Mr. Thayer.

Adjourned.

Afternoon.

The meeting having been called to order, on motion of Mr. Mackintosh, it was *Voted*, That the Institute do now proceed to the choice of officers for the next year. Messrs. Thayer, Pettes and Mackintosh, were appointed a Committee to collect and count the votes.

All the gentlemen nominated were unanimously chosen, viz.

PRESIDENT.

WILLIAM B. CALHOUN, Springfield, Mass.

VICE-PRESIDENTS.

James G. Carter, Lancaster, Mass.

John Pierpont, Boston.

George B. Emerson, Boston.

Daniel Kimball, Needham, Mass.

Gideon F. Thayer, Boston.

Elipha White, John's Island, S. C.

Samuel Pettes, Brookline, Mass.

E. A. Andrews, Berlin, Conn.

Nehemiah Cleaveland, Newbury, Mass.

Jacob Abbott, Roxbury, Mass.

Denison Olmsted, New Haven, Conn.

John Kingsbury, Providence, R. I.

Horace Mann, Boston.

Theodore Edson, Lowell, Mass.
Charles White, Owego, N. Y.
Andrew S. Yates, Chittenango, N. Y.
Benjamin Greenleaf, Bradford, Mass.
Peter Mackintosh, jr. Boston.
Samuel M. Burnside, Worcester, Mass.
Frederick Emerson, Boston.
John A. Shaw, Bridgewater, Mass.
Elisha Bartlett, Lowell, Mass.
Samuel G. Goodrich, Roxbury, Mass.
Charles Brooks, New York.
Samuel R. Hall, Plymouth, N. H.
Leveret Saltonstall, Salem, Mass.
Dorus Clarke, Springfield, Mass.
John A. Pierce, Detroit, Mich.

RECORDING SECRETARY.

Thomas Cushing, jr. Boston.

CORRESPONDING SECRETARIES.

William Russell, Boston.
Aaron B. Hoyt, Boston.

TREASURER.

William D. Ticknor, Boston.

CURATORS.

Henry W. Carter, Boston.
Josiah Fairbank, Charlestown, Mass.
Nathan Metcalf, Boston.

CENSORS.

Charles K. Dillaway, Boston.
William J. Adams, Boston.
Joseph H. Abbot, Boston.

COUNSELLORS.

Theodore Dwight, jr. New York.
Emory Washburn, Worcester, Mass.
William Lincoln, do. do.
Artemas B. Muzzey, Cambridgeport, Mass.
Thomas Sherwin, Boston.
David Mack, Cambridge, Mass.
William Barry, jr. Framingham, Mass.
Hiram Fuller, Providence, R. I.
Thomas D. James, Philadelphia, Pa.
Alfred Greenleaf, Brooklyn, N. Y.
Nathan Bishop, Providence, R. I.
Henry Barnard, 2nd, Hartford, Conn.

At 3 o'clock, a Lecture was delivered by the REV. HENRY A. MILES, of Lowell, on "Natural Theology, as a study in Schools."

Mr. Thayer having made some introductory remarks, and read some extracts from the records, offered the following resolutions;

Resolved, That the American Institute of Instruction have heard with feelings of deep and unfeigned regret, of the sudden demise of their former associate and valued Vice-President, Ebenezer Bailey, for many years an eminent school teacher, to whom the Institute owes a large debt of gratitude for his zealous and valuable services in its early days.

Resolved, That his labors in this Association, and his successful efforts in the cause of human improvement, will ever be held in sacred and envied remembrance.

Resolved, That this Institute deeply sympathize with the afflicted widow and family of Mr. Bailey in their melancholy bereavement, and tender the tribute of condolence to them in this period of their sore calamity.

Resolved, That the Recording Secretary, be requested to communicate in behalf of the Institute, to Mrs. Bailey, a copy of the foregoing resolutions.

After some remarks from Messrs. Thayer, Greenleaf and Emerson, the resolutions were unanimously passed.

Mr. Pettes then presented the report of the Committee to whom were referred the resolutions and letter in regard to the National Convention at Philadelphia, containing the following resolutions;

Resolved, By the American Institute of Instruction, that so important is the general dissemination of knowledge and virtue to every community that would be either wise or happy, that we rejoice in all judicious movements having for their object an increase of the means of attaining these important ends.

Resolved, That the proposal of the American Lyceum, for a general Convention of the friends of education at Philadelphia in November next, meets the entire approbation of this Association.

Resolved, Therefore, that we hereby appoint the several members of the Board of Directors of this Institute, delegates to said Convention, and that the Secretary be requested to furnish such members as may be able to attend, with a certificate of their appointment.

After considerable discussion the resolutions were laid on the table.

Adjourned.

Evening.

The following subject was taken up for discussion: "How can the current defects in the reading and spelling of our community be obviated?" Remarks were made, and accounts of different methods of teaching given by Messrs. Greenleaf, Pettes, Cushing,

Thayer, Fuller, Stowe, of Ohio, Mann and Parrish of Westfield, Hartshorn, of Providence, and Clark, of Springfield.

Adjourned.

Saturday, Aug. 24.

The meeting having been called to order, the President stated that a number of the volumes of the Lectures delivered before the Institute, had been received in Springfield, and were for sale at the bookstore of the Messrs. Merriam.

On motion of Mr. Pettes, it was

Voted, That a Committee be appointed to take into consideration the expediency of bringing some portions of the volumes before the community, in some form calculated to give a wider circulation to the information contained in them, than at present. Remarks advocating the measure, were made by Messrs. Calhoun, Barnard, Clarke, Stowe and Emerson. Messrs. Pettes, Mann and Emerson, were appointed a Committee for this purpose.

Mr. Dillaway was appointed Treasurer pro tem., Mr. Carter having left town.

On motion of Mr. Emerson, it was

Voted, That the Lectures at the book-store be disposed of to members of the Institute and female teachers, at fifty cents per volume; also, that, if the supply be insufficient, the names of those wishing them, be taken and sent to Boston, and that the volumes be furnished them.

A Lecture was then delivered by THOMAS CUSHING, Jr., of Boston, on "The Division of Labor in Instruction."

Messrs. Pettes, Greenleaf, Mann and Mack, made remarks upon the subject treated of in the Lecture.

The President then made some interesting remarks, exhorting those present to attend the County Convention at Springfield, on Monday next, and make it a day to be remembered; also to further the objects of the Institute by becoming members, and thereby giving their influence and money to its useful purposes.

Remarks of the same character, were also made by Professor Stowe.

The next Lecture was delivered by MR. DAVID MACK, of Cambridge, on "The Claims of our Age and Country upon Teachers."

Adjourned.

Afternoon.

The meeting having been called to order, the Committee to whom was referred the expediency of publishing a portion of the volumes of Lectures for popular use, reported as follows:—

"The Committee appointed to take into consideration the republication of the Lectures, in whole or in part, have attended to that duty and would beg leave to make the following report. That, while the Committee value the collection of volumes which have

been offered to the community, as of such worth as ought to give them extensive circulation, they think that a republication of a selection from the whole, in a cheaper and more compact form, would be more likely to obtain a wide and useful circulation. The Committee, therefore, recommend that the Censors be authorized to make arrangements with some publisher or publishers, to effect this object, provided it can be done without expense to the Institute. Your Committee further recommend, that no Lecture be published in part in this new edition, but that it should be taken or left as a whole; and that the Censors report their progress as often as convenient to the Board of Directors or to the Institute. All of which is respectfully submitted.

The report was accepted after remarks from Messrs. Calhoun, Barnard, Emerson and Pettes.

The Institute then listened to a Lecture from Mr. G. F. THAYER, of Boston, on "Courtesy."

Remarks were made upon the Lecture by Professor Stowe, Messrs. Mann, Pettes, Mackintosh, Peirce, Greenleaf and Emerson.

Adjourned.

Monday, Aug. 26.

The Institute having been called to order by the President, the following alterations, recommended by the Board of Directors, were acted upon separately and unanimously adopted;

Instead of the third Section of the Second Article, the following;

Any gentleman paying at any one time ten dollars, or who may have attended ten annual meetings and paid his assessments, shall be considered a member for life, and be afterwards exempt from the ordinary annual tax.

Instead of the first Section of Article Third, the following;

The Annual Meeting shall in future be held on the Tuesday preceding the third Wednesday in August, at such place as the Board of Directors may appoint.

Instead of Section ninth of Article Fifth, the following;

Stated meetings of the Board of Directors shall be held at Boston, on the first Wednesday of January, the last Wednesday of May, and at such place as the Directors may previously appoint, on the day preceding, or on the morning of the day on which the Institute shall commence its Annual Session.

In Section first of Article Fourth, after the word Secretaries, the words "one foreign, the other domestic," shall be added.

The report upon the subject of the National Convention at Philadelphia, was then taken up, and, after some discussion, was again laid upon the table.

The time for the meeting of the County Convention having arrived, the Institute adjourned.

Evening.

PROFESSOR STOWE, of Cincinnati, delivered a Lecture on "The Bible as a School Book."

Adjourned.

Tuesday, Aug. 27.

The President having called the meeting to order, the subject of sending one or more delegates to the Convention at Philadelphia, was again taken, and, after some discussion, was referred to the Board of Directors, with authority to use their discretion in the matter.

Professor E. A. Andrews was added to the list of Vice-Presidents.

The first Lecture was delivered by the Hon. ALEXANDER H. EVERETT, of Roxbury, on "The Progress of Moral Science and its Application to the Business of Practical Life."

After a short recess, another Lecture was given by Mr. THOMAS P. RODMAN, of Providence, on "The Comparative Results of Education."

Mr. Calhoun having been obliged to leave, Mr. Pettes, the Senior Vice-President present, took the chair.

Mr. Dillaway offered the following resolutions which passed unanimously.

Resolved, That the thanks of the American Institute of Instruction be presented to each of the gentlemen who have favored the Institute with Lectures during the present session.

Resolved, That the thanks of the Institute be presented, through the President, to the town authorities of Springfield for the use of their Town Hall; and to the Unitarian Society for the use of their church during the session.

Resolved, That the thanks of the Institute be presented to the editors of the public papers of Springfield, for the efficient aid which they have gratuitously granted during its present session.

A resolution passed by a Convention of the friends of Education in Hampden County, expressing a sense of the benefit which had been conferred upon them by the meeting of the Institute at Springfield, was communicated.

After which, no further business coming up, the Institute adjourned sine die.

THOMAS CUSHING, JR. *Recording Secretary.*

ANNUAL REPORT.

THE Directors have great pleasure in stating, in this their Annual Report, that the condition and prospects of the Institute are more than usually favorable; and furnish its members and the friends of improvement throughout the country, with ample encouragement to believe that the cause in which we are and have been so long engaged, is making sure, steady, and healthful progress, which will, as we trust, extend far and wide over the habitable regions of civilized man.

It is cheering to witness what has already been accomplished, and to observe that each succeeding year adds something, calculated to advance the intellectual condition of the teachers and pupils of our schools. While this association shall continue its annual meetings and send abroad its volumes of transactions, the good work must still go on. The contact of mind with mind, the discussion of topics connected with education, the statements of modes of discipline and instruction, which meetings of large numbers of persons engaged in the vocation of the teacher, bring forth,—cannot fail to be of immense advantage, especially to those of little experience in the business of instructing and managing the young; while all, even the most mature, may enlarge to some extent their stock of ideas on the subject.

Many of the published Lectures of the Institute are admirable dissertations on the subjects which they treat, and the series of volumes together, furnish perhaps as good a library of education as can be found in any language. They have not hitherto been generally appreciated as they deserve, but are rising in public esti-

mation, from year to year, and will, ere long, probably, be resorted to, as a rich storehouse of information, by the educators of our country, and by those who are training for the responsible office.

The Censors were in doubt, at the beginning of the year, as to the expediency of publishing the volume for 1838, on account of the expense attending the volume of the preceding year, which had drawn somewhat largely upon the treasury; but having submitted the matter to this Board, they were instructed to publish it on the most advantageous terms that could be obtained.

A negotiation was accordingly concluded with the Treasurer of the Institute, to publish 250 copies for \$185,40; the sale of which, though not rapid, has been nearly sufficient to reimburse the Institute for the money invested in them, and has given additional reason to believe that the continuance of the publication of the Lectures during future years, is highly important to the interest, if not to the existence of the association.

The Curators report, that a pleasant and agreeable room, for the deposit of the Institute's books, and for the meetings of the Directors, Committees, &c. has been furnished, free of expense, since April last, by Marsh, Capen, Lyon & Webb, at No. 109 Washington Street, Boston; where may always be found the periodicals taken by the Institute, and an extensive variety of books on education. The room is constantly warmed and lighted, is free to all members, and affords a pleasant resort for those who are interested in the objects of this association. The library has not gained many accessions of books during the present year, but has heretofore received, through the liberality of publishers, many valuable works on subjects connected with human improvement.

There are on hand volumes of the Lectures of several preceding years, which may be procured by individuals on liberal terms.

The Treasurer reports, that at the beginning of the current year, there was due to him \$31,71. The receipts since that time, have been \$450,87, the expenditures \$430,98; leaving a balance due to that officer, of \$11,82.

The State grant of \$300, which has been received annually for four successive years, will subside with the present year, and a Committee of this Board should be appointed, to petition the Legislature for a renewal, which, it is hoped, will be extended, as the

current expenses of the Institute cannot be met without such aid. When, therefore, the public benefits arising directly and indirectly from this association, are taken into view, the Directors cannot entertain a doubt, that those who have charge of the general welfare of the Commonwealth, will, with their accustomed liberality, grant the prayer of the petitioners.

The premium of \$500, offered early in 1838, for the best Essay on a system of Common School Education, has not brought forward so large a number of competitors as was at that time anticipated. Four Essays, however, have been received, and are now in the hands of a Committee, appointed by the Directors in May last for their examination. This Committee have not as yet been able to decide on the successful performance, and ask further time for deliberation. Public notice of the result will be given at the earliest convenient period.

In conclusion, the Directors would avail themselves of this occasion, to congratulate the friends of progress in our country, on the interest which is, on the whole, so generally manifested in the work of universal education, and to express the confidence they feel, that the labors performed in this field, by the American Institute of Instruction, will not lose their reward.

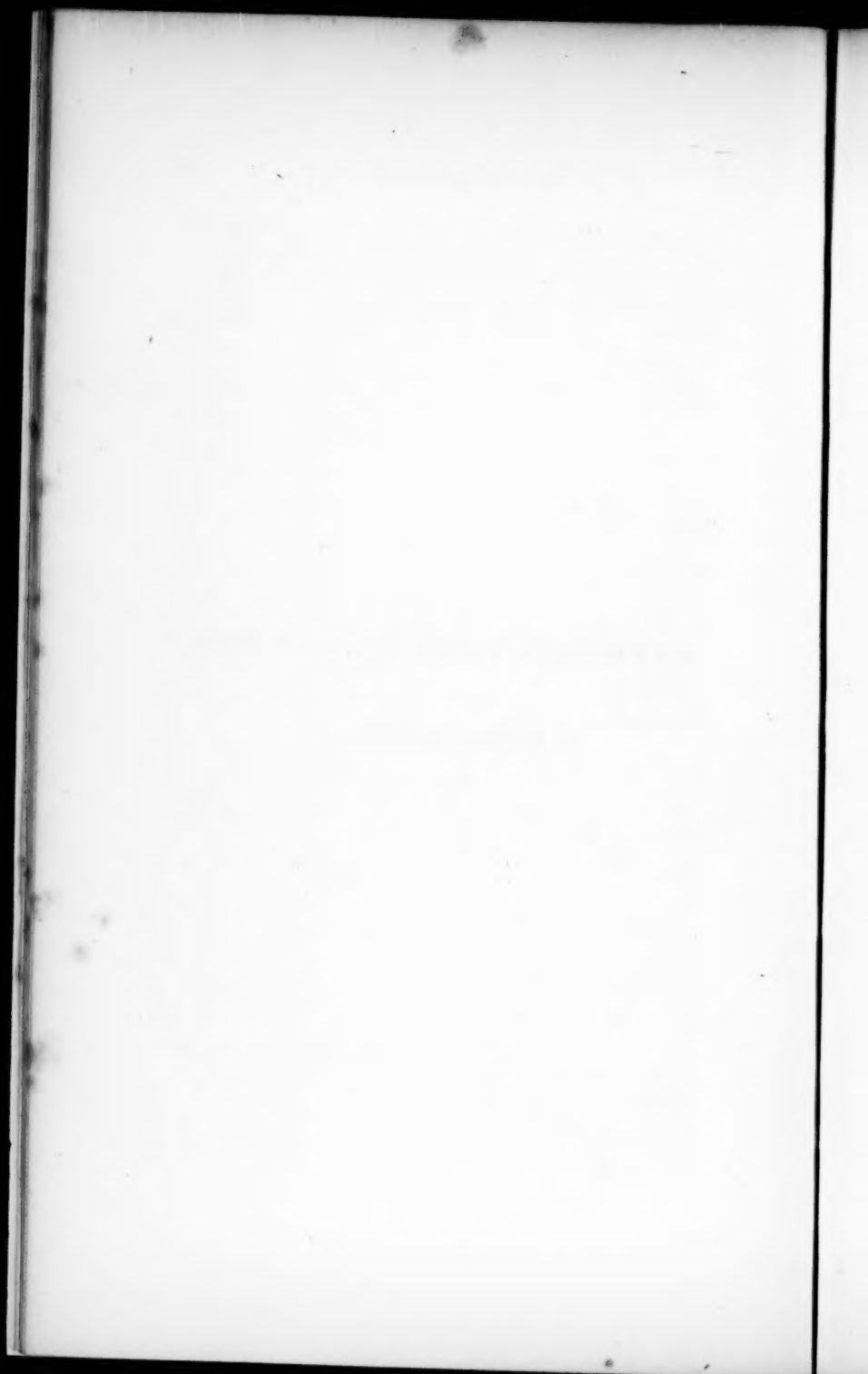
For the Directors,

G. F. THAYER,	} Committee.
CHARLES K. DILLAWAY,	
SAMUEL PETTES,	

Springfield, August, 1839.

INTRODUCTORY DISCOURSE,

By ROBERT RANTOUL, JR.



THE EDUCATION OF A FREE PEOPLE.

THE end of the institution, maintenance and administration of government, is to secure the existence of the body politic ; to protect it ; and to furnish the individuals who compose it, with the power of enjoying, in safety and tranquility, their natural rights, and the blessings of life ; and whenever these great objects are not obtained, the people have a right to alter the government, and to take measures necessary for their safety, prosperity and happiness.

The Constitution of the Commonwealth of Massachusetts begins with these words. They are sufficiently explicit to express the American idea of the purpose of government ; but a shorter definition occurs in the seventh article of the Bill of Rights. "Government is instituted for the common good ; for the protection, safety, prosperity and happiness of the people." Of the entire correctness of this sentiment, fortunately, there is, among us, no difference of opinion.

The letter issued by the unanimous order of the Convention which framed the Constitution of the United States, dated September 17th, 1787, and bearing the signature of George Washington, President of the Convention, announces another fundamental principle, equally well established with the former. It is this.

"Individuals entering into society, must give up a share of liberty to preserve the rest. The magnitude of the sacrifice must depend as well on situation and circumstance, as on the object to be obtained. It is at all times difficult to draw with precision, the line between those rights which must be surrendered, and those which may be reserved."

It is agreed then, on all hands, that the object of government is the common good, and that this object can never be accomplished without the mutual surrender of a share of liberty.

We hence deduce two perfect and unexceptionable tests, by which we may determine the comparative degrees of excellence of all former or existing governments.

First. That government is best, which most effectually secures the common good ; and provides for the protection, safety, prosperity and happiness of the people.

Second. That government is best, which works out these results with the least possible sacrifice of individual liberty.

No government ever did, or ever can, answer either of these conditions except where the great mass of the people are well and highly educated.

Look, for a moment, at that rude form of government which exists among savages. Its objects are but very imperfectly secured, and yet this result, unsatisfactory as it is, must be purchased by an almost total sacrifice of individual liberty. There is no more arbitrary, irregular and capricious despotism in the world, than that of the chief of a horde of the most ignorant and brutalized savages. And yet what equivalent do these miserable creatures receive for this surrender of their rights ? They suffer in unmitigated slavery ; the complex arrangements by which civilized men provide for the security of the person, liberty, character, and property, are not only out of their reach, but beyond their conception. Their very life they hold at the mercy of a tyrant. They have absolutely no guarantees, and with all the evils of despotism, they endure also most of the plagues of anarchy.

Among barbarians, there is to be found a class, small in numbers, but strong in the exclusive possession of knowledge, better informed, and more refined than the rest. These influence and humanize the action of the government, even where its form continues to be a pure despotism. There are fewer gratuitous outrages. Its action becomes more regular, and steady, and subject to fixed laws. However it may invade the rights or trample upon the happiness of the people for its own aggrandizement, it sternly suppresses the violence of others, protects the weak against all the strong except itself, the strongest, and does justice between man and man, reserving to itself the monopoly of injustice.

But among civilized nations, intelligence being more widely diffused, a larger portion of mankind press forward, to have a

share in the government of themselves, and to try whether they may not better provide for their own prosperity and happiness, and at the expense of a less sacrifice of individual liberty. Their number daily multiplies, and they press forward with efforts continually renewed.

The object of all effort is change. We labor to produce some modification of matter conducive to our own gratification, some improvement in the character, or conduct, or relations of other men, or some melioration of our own individual character or circumstances.

The consciousness of the ability to affect the course of events, to influence opinion, feeling, and action, and to exercise a larger share of control over the fortunes of ourselves and our fellows, is a pleasing consciousness. The desire to possess and employ this ability springs up in every breast, and can never be eradicated, though under right guidance it can be subjected to the wisest and the holiest purposes. Often it has spread desolation over provinces and kingdoms; often it has gone forth upon its errand of mercy, unappalled by danger, unsubdued by suffering. For good, or for evil, as philanthropy, or ambition, it exists everywhere, and is forever active. The love of power is an instinct of our common nature. Developed in widely different forms, according to the various influences to which we are exposed, it is none the less a universal passion. The love of honor, and of official station, the love of fame, the thirst for knowledge, the craving after wealth, are some of the phases which this passion assumes. Obedient to its impulses, intellect and energy have ruled the world, and the world's history hereafter is to be determined by the disposition of this passion in the rising generation and their posterity.

Never was the love of power before so active as in the present age. It is the leaven with which the world ferments. Never before was there such a heaving of the whole mass. The signs are ominous of change, extensive, rapid, deep-reaching and irrevocable change. Millions are possessed with the determination, before confined to a few thousands, to make their will felt in the management of their common interests. The many choose to take their joint concerns out of the hands of the few, who have hitherto monopolized both the power, and the profit, as well as the glory of government, and it is to be settled whether a majority cannot administer its affairs more according to its own liking, and with greater ultimate benefit, by understanding them and directing them, than by intrusting them to a small minority, in

whom, by the very trust, is created an interest adverse to the general good, an interest to fatten on the plunder so improvidently placed within its grasp. The blind and unconditional surrender by the multitude, of their fortunes, rights, and lives, to be sported with at the pleasure of their masters, seems to be drawing to an end in every civilized country.

In all rational calculations of advantage from this mighty change, the most momentous of the revolutions in their political condition that mankind have undergone, our own example is, and long must be, an essential element. A fact is worth more than a whole volume of speculations. One successful issue is better than a thousand untried theories.

A high, peculiar trust, devolves upon the people of the United States of America. The grand experiment of self-government is on trial here, for the whole world and for all time. While all mankind are their spectators, it behoves the actors to conduct with dignity. While the destiny of countless future generations may be vitally affected by the result, we have no right to neglect any disposable means of success. We are answerable, for the fate of free institutions in the present age, not merely for sixteen millions of men, but for the race. We are responsible, and posterity will hold us accountable, for the prospect of the cause of liberty after we have left the stage. If that bright futurity into which young hope looks forward be overclouded by our fault, how deep and just the condemnation that must fall upon us. But if the path of freedom be illuminated with the lustre which a faithful performance of our duty will shed over it, all that walk therein will call us blessed. Let us be but true to ourselves, and to our world-voiced vocation, and we shall win and wear the undying glory of the victory over ignorance, over vice, over misery, and over slavery. If this victory, by God's grace be once achieved, the great warfare is forever accomplished. The power of evil flies to the abyss, and plunges into genial and eternal darkness. Joy courses round the world with the tidings of his downfall, and the gratitude of redeemed millions hails his vanquishers, the guarantors of human happiness, the fathers of a new order of ages.

Upon us, as a people, rests the fulfilment of these splendid destinies. Upon our capacity for the improvement of advantages never before vouchsafed to any portion of the children of men, depends the issue of man's history. Universal education will determine this capacity. The refined product of that education, our literature, will everywhere communicate the results, and teach the practical lessons involved in our experience.

Governments represent the elements of power which exist in society previously to their formation. Physical force, intellectual supremacy, moral influence under different names, and the power of wealth, each has heretofore claimed its share in the control of the body politic. As one or the other of these ingredients predominates, the government assumes that mode of being and action which most naturally expresses, receives, and conveys, the impulses of the several pre-existing active interests which created and sustain it; it may be military despotism, spiritual hierarchy, feudalism, plutocracy, or any mixed influence of two or more of these, as has most frequently happened.

These different simple forms of government, and various combinations compounded of them, have succeeded each other according to the laws that govern the distribution of knowledge and wealth, and so must forever continue to alternate, wherever the people have not advanced to that degree of social elevation requisite to the condition of fitness for the enjoyment of self-government. The crown, the sword, the mitre, and the money bag, have had their turns; and looking back through the obscure history of long extinguished freedom, we can but dimly discern, and that for a few short intervals, the appearance on the stage of any other power, until the breaking out of the American and French Revolutions.

Of late, the prominent element of power in society has been the influence of popular information acting through the medium of public opinion. This influence can be developed in a wholesome form only by the general, well-advised, and thorough education of the whole people. Intelligence and virtue are the only safe foundation of Republics. This is a truism which has been so often repeated that we have almost ceased to feel its force. It is not the less important to remember, and to act as if we had not forgotten, that they constitute the only basis upon which free institutions can be established, administered, and perpetuated.

When I consider these truths, I am solemnly impressed with the undoubting conviction, that universal education may be justly deemed the Palladium of our Civil Liberty and Social Well-being. Our government is eminently a popular government. The people are sovereign not only in theory but in practice. To their suffrages is the final appeal on every question, and this appeal is more frequent and more direct with each succeeding year.

Every man, therefore, among us, is called upon to pass his judgment upon the most complicated problems of political science.

Ought he not to understand that which he must decide? And how can he understand these often abstruse and really difficult questions without a knowledge of the particular facts in the case before him, and correct general information upon political economy, statistics, moral philosophy, history, the nature, attributes, and mode of operation of civil government, and above all the nature of man? These are essential to intelligent legislation, and with us every voter is a legislator, for he chooses his representatives with express reference to their opinions upon a thousand matters which he has already settled in his own mind.

What then? Should any conscientious citizen shun the duties of his station? Should he abdicate his high prerogative? In vain would he seek to transfer to others the responsibility which devolves upon himself. He is an integral portion of the government of his country, and its offices he must discharge well or ill, for the common weal, or for the common woe, until death releases his obligations. Let him not then fold his arms, cry, who is sufficient for these things, and with reckless indifference float just where the current may drift him. The public interests committed to his care are not of that trivial value, that he may listlessly let them pass, and not be greatly wanting to fulfil the allotted part which in the grand harmony of the universe was fitted for his performance: nor can he separate happiness from duty, nor satisfy his conscience till he has accomplished his mission of citizenship: neither is his own fate independent of the community, nor is he unaffected by its fortunes and character. Innumerable ties connect him with society. Countless sympathies, growing out of every relation of life, sway him to and fro, so that the commonwealth suffers no detriment in which he is not harmed, nor can rejoice in a blessing in which he does not participate. No private good can be secured without those same qualities of courage, independence, energy, and perseverance, which are requisite and sufficient for his task of public good.

Let him then rouse all his manhood for the conflict with indolence and ignorance. Let him qualify himself by assiduous application to the sources of knowledge, by ceaseless efforts to acquire and perfect habits of usefulness, by exhibiting a praiseworthy and profitable example, to act well the part of a good citizen, instead of deserting that honorable post in which it has pleased Providence to place him.

But he is not posted in a stationary location. He is ranked among an onward host. Every man, as a man, because of the

nature of his being, has a right to expect and is bound to attempt the advancement and improvement of his being. Every American citizen enjoys this hope, and incurs this obligation, with comparatively few impediments in the way of fulfilling them.

There is a peculiarity implanted by its Maker in the human mind, never to rest satisfied with its present condition. How high soever its present attainments, it presses on with an undiminished ardor for something higher and better : it forgets the things which are behind and looks forward with immortal aspirations to those which are before. For the wisest ends, God has given this desire to every human soul, and has made it unremitting and inextinguishable. Prosperity does not satiate it ; disappointment does not damp it ; through successes, through reverses it still burns on, warming with its healthy glow the heart that is chilled by adversity ; urging to more vigorous action the enginery of the intellect that has already surpassed competition. The cant of all ages, the cant of philosophy, as well as the cant of superstition, has often been levelled against this noblest of our instincts, but the united hostility of sophistry and fanaticism has always been unavailing. You might as well by your reasoning persuade man that he was made to grovel on four limbs, prone, like the beasts, instead of lifting his head proudly like the lord of the lower world, as to reduce him to the sordid contentment of the brutes who know nothing of the future, from that sublime and celestial impulse to ameliorate and to exalt his condition, to purify and to perfect his nature, which he was created a little lower than the angels to entertain and to enjoy. You might as well think to blot out the sun from the heavens, as to quench the fire which the All-wise has kindled in the human breast. Through the whole species it is pervading as the breath of life, all-grasping as the intellect, undying as hope. The desire of bettering our condition has been arraigned as a criminal opposition to the ordinations of Providence. The infallible monitor within us answers, no : it is prompted by Providence. In vain has contentment, *inert, absolute contentment*, which should desire no change, been inculcated as the highest earthly duty, from the pulpit and the press, by the orator, the poet, and the moralist. We cannot be *thus* contented, and it is well for us that we cannot.

It has been written, said, and sung, in a thousand plausible ways, that ignorance is better than knowledge, poverty better than wealth, listless apathy better than intense interest, inert idleness than industrious activity,—and that therefore it is fool-

ish to endeavor to improve our condition, since all these *negative* blessings can be enjoyed without effort. The love of paradox has given some currency to this mischievous theory; much more, however, at the latter part of the last century than of late years; but in practice, men's instincts have generally proved too strong to be stifled by errors of speculation. To a philosopher who should labor to propagate any such doctrine, the reply of a plain workingman would be, Sir, your conduct gives the lie to your professions. If you really feel that indifference and supine inaction constitute the only true felicity, why trouble yourself about arguments and systems, and take so much pains to convince others of their soundness? You have got together a great deal of learning to prove that ignorance is bliss, and work very hard to demonstrate that you prefer idleness to activity. The only position you establish thereby is that your own mind loves to be in motion,—that your nature will not suffer you to be at rest, in spite of your theory to the contrary,—but that, like all the rest of the world, you seek enjoyment by the exercise of your faculties.

If the desire of improving our condition—the *instinct of perfectibility*—cannot be suppressed, is it desirable that it should be confined to the narrowest possible limits, or should it be encouraged to enlarge itself, and take the widest scope opportunity offers it? Most decidedly the latter. It is this instinct which rouses us to action, which urging us on to benefit ourselves, impels us into courses which benefit others, and to which is to be attributed the progressively accelerated career of social, moral, and intellectual improvement.

Is the instinct of perfectibility to be less cultivated among any class of men, for instance, workingmen, than among others? Decidedly the contrary. It is this that makes men useful, makes them workingmen. A man never acts, except from long established habit, or instinctive impulse, without a motive; and this motive is always, in some form or other, the desire of increasing his happiness. Now let a man set about the pursuit of true happiness systematically, and follow it up perseveringly, and he becomes at once a genuine philanthropic workingman. And shall those whose plan of life is to subserve their own best interests by promoting the best interests of society, be postponed to those who drift down the current of time, without chart, compass, or attempt at a reckoning? It not only must not be, but cannot be. It is not only unjust, but impossible. We are all travelling onward towards perfection, and nothing can retard our pro-

gress but our own wickedness, or our own folly. In whatever respects circumstances ought to be different from what they are, let us recollect that it is the sovereign people, for the most part, who make the circumstances. Whatever change is requisite in the institutions of society, or in the laws of the state,—we mould the institutions, we enact the laws. The power is in our hands to use it for our common good. The high places of the Republic are ours, to dispose of them as we will. Wealth and honor, respect and influence, the delight of advancing steadily from good to better, the glory of having done well, the proud consciousness of having deserved well, the solid satisfaction of success earned by merit, these are some of the rewards in prospect before us. In no time since the creation, in no nation under the sun, have the whole people beheld that open path before them, in which we are invited to walk. There are no obstacles in the way to deter us from entering it, but only such as operate as incentives to the resolute. Advancement in life courts every American citizen to accept it, and nothing can snatch it from his grasp but some unpardonable vice inherent in his own character.

The great object of our working class, and indeed of our whole people should be, and I doubt not will be, to place themselves upon a level with their opportunities, to fulfil their mission to furnish for the world a model nation, a living exhibition of the capacity of the human race for greatness, for goodness, and for happiness. To this end, the steady purpose of all our endeavors should be the promotion of national morality; and it should be our constant inquiry, what means may we employ, best suited to accomplish it.

The mightiest engine in the hands of the people is their faculty of self-cultivation. Their determined plan of action should be to enlighten the intellect, and thereby to enable themselves to know how to discern between good and evil. In this plan, with the advancement of every man, by his own effort, in knowledge and virtue, should be included also the broadest platform for the general and thorough education of all the children of the community. To cultivate a correct moral taste, to elevate the standard of feeling, and to foster virtuous dispositions, are necessary concomitant parts of such instruction skilfully pursued.

Morality is the natural effect of a comprehensive intelligence. This general proposition may be easily substantiated.

That the general diffusion of knowledge will promote such an education as will develope and strengthen the religious principle, and confirm all the sanctions of virtue, is to my mind undeniable;

but this proposition it forms no part of my present design to discuss. True it may be that some intellectual faculties are often highly cultivated with no better result than to render the possessor mightier to transgress the moral law ; but this is not the inherent evil of intellectual strength : it is only the vice of its imperfection. Destroy the just balance of the faculties, and their action is of course perverted ; but this fact no more argues that we ought not to use the intellect and strengthen it by use, than the fact that overworking a limb will produce bodily deformity proves that energetic muscular exercise, judiciously varied, is not profitable for the healthy development of the physical system. Nor will any teacher, skilful in the momentous duties which devolve upon him, neglect to establish habits in his pupils, by a course of training suited to that end, which will go far to carry them safely through the manifold temptations of after life ; for indeed we are, for the most part, creatures of habit, from which there spring, unconsciously, a thousand acts, for every one that can be considered as the determination of careful, impartial, philosophical deliberation. But this subject also is too important to be dispatched in a parenthesis. It demands to be thoroughly treated by itself ; and I therefore pass it over in the present discourse.

Beside the direct tendency, then, of intellectual education to promote that pure and undefiled religion which is the safest foundation for the most exalted morality, and omitting that all pervading influence of fixed habits of well doing, which every youth that leaves a New England school should feel through life, is there not in mere intelligence itself an originating cause, a creative impulse of a sound social morality ; an impulse by no means all-sufficient alone, yet in its co-operative power with religion and habit, never to be overlooked or undervalued ?

A man's character depends upon his practical opinions. For this we have the authority of an apostle, "*As a man thinketh so is he.*" But a man's practical opinions, so far as he is a reasonable and consistent being, must depend upon, and grow out of, his theoretical opinions. So much so that we are expressly directed to judge of every man's faith by his works, since a good tree cannot bring forth evil fruit, neither can a corrupt tree bring forth good fruit. And it cannot be otherwise, since, except from long established habit where the motive influences us, if at all, so unconsciously to ourselves that we can hardly be certain of its existence, or from those instinctive impulses where the dictate of nature supplies the place of a motive, a man never acts without

a motive, and according to the views he entertains of his own highest happiness, and of his relations with the world about him, will be the motives which operate on him, and which operating frequently and through long periods of time, will often essentially modify not only his habits, but even the very instincts and propensities of his nature. The importance of this fundamental doctrine will justify for it a more attentive consideration. Let us examine then, what it is, as often as the intellect intervenes, that governs the conduct of men: what are the rules of morality: and, independently of religious considerations, what other inducements, superadded to the teachings of his nature and the promptings of his conscience, what inducements addressed to him through the medium of the intellect, has every man to be moral.

Let me not be misunderstood. I am not about to assert, or to intimate, that we should depend upon intellectual education to form the moral sense, and to perfect the moral character. I hold directly the reverse. My object in this investigation is to refute that calumny against human nature and blasphemy against God's Providence, that Ignorance is the Mother of Devotion and Virtue, by showing that intellectual education, so far as it affects the moral character, cannot but foster and confirm all holy influences.

Honesty, veracity, honor, benevolence, love, patriotism, are not inductions from facts, or corollaries of any theory, or conclusions originally wrought out by any process of reasoning; but where these, and the other virtues that cluster round them spring up from pure and abiding principles planted in the heart, all facts, all theory that is not falsehood, all reasoning that is not sophistry, sustain their vigorous growth. The dark, dank vapors of ignorance would chill and blight them, but the cheerful sun of knowledge can only impart warmth, and health, and life to that goodness which, because it is by the constitution of nature in exact harmony with all truth, therefore loves the truth, and comes gladly to its light.

What is it—whenever an appeal is made to the intellect to decide the question of interest—what is it that governs the conduct of men? Mankind are by the constitution of their nature, capable of deriving happiness from many different sources. They have instincts which desire to be gratified, and in the gratification of which they experience a vast variety of enjoyments. These instincts were designed by their Maker to be gratified, and it is only in the properly adjusted gratification of these capacities that happiness consists; yet the whole history of the world presents us with the melancholy spectacle of mankind making them-

selves, and making each other miserable by the unwise, indiscriminate and unrestrained gratification of their instincts. The limits of healthy and rational indulgence are every where determined in the order of nature ; and he who may pass beyond them in search of some good which nature intended not for him, although he may grasp some fleeting pleasure, will find, when perhaps he least expected it, a latent pain provided by the beneficent Author of the universe, to teach the erring mortal a bitter, though wholesome lesson of forbearance and moderation. These limits exist in the dispositions and wants of other men, in the constitution of things about us, and in our own constitution. By confining all our desires within these limits we shall never waste our strength in ineffectual struggles after unattainable good ; by cultivating and gratifying all our instincts up to these limits, we shall obtain the highest amount of happiness of which our nature is capable. We cannot satisfy any of our capacities for happiness without employing the means which nature affords us. We can create nothing, and we can modify her creations only by directing operations which she herself performs. We must take advantage of her aid, for without her we can do nothing. She however furnishes with a bountiful hand. We have only to ask with an intelligent faith, and we shall receive. All the works of God seem suited for the sustenance, the delight, and the perfection of man. His creation is one vast magazine of blessings, into which whosoever will abandon all preconceived prejudice, all false philosophy, and all vain conceits, and come to nature humbly and inquiringly as a little child, desiring to be taught of her, may enter in and enjoy. The mineral, the vegetable and the animal kingdoms are filled with innumerable correspondences, fitted to meet the requirements of our own constitution. We need only comply with the conditions to be recipients of the benefits they are intended to confer. Our fellow beings are related to us by common wants to be relieved, common desires to be satisfied, common dangers to be averted, common sorrows to be comforted, common weaknesses to be assisted, and common hopes, rewards and consolations to be enjoyed together. In all these, and in all their other relations, no less numerous than their powers of receiving or imparting advantage or injury, mankind are full of sympathies, and in these sympathies there is a rich and inexhaustible mine of the noblest and most exalted pleasures. But more than all, in the structure of our own souls provision is made for their highest well-being, and for the full fruition of a more exquisite beatitude than any external good can bestow upon

us. Our Maker has not left us to be the sport of time, and place, and chance, and circumstance ; within ourselves are the fountains, pure and perennial, of living water, springing up to everlasting joy, whereof whosoever drinks need thirst for no other. Thus it is that in the properties of external things, in the constitution of our fellow-creatures, and last and chiefest in our own breasts, we are to search for the sources of all the happiness our nature is capable of experiencing.

Here then we arrive at a great truth—

KNOWLEDGE IS POWER. For unless we know and understand the properties of matter, the dispositions of men, and our own faculties ; in short unless we are acquainted with the laws, moral and physical, by which we, and the world we live in, are governed, how can we take advantage of those laws—how can we employ our faculties, or derive any profit from the excellent qualities of the good things afforded for our use ? We shall be like a blind man in a gallery of choice pictures, or like one destitute of hearing at an oratorio of some great master : the eyes of our understandings are not enlightened to distinguish between good and evil, our ears are not attuned to the harmony of nature. But he who knows the properties of things, their mutual dependencies and their fixed laws, knows the springs by which all the machinery of the world may be set in motion. He is indeed the Lord of the creation. Whatever he wills he does, for he knows where to find, and how to command the means of doing it. Out of seeming evil he produces real good, and in this he imitates him in whose image he was created. Those agents of destruction, most terrible to uneducated man, become willing ministers of his purposes. The unconquerable elements obey him. The ocean bears his treasures on its bosom : the winds waft them : the waterfall turns the wheels of his engines. Fire subdues for him the hardness of the most obdurate substances, and steam, like some mighty genius of Oriental Romance, confined by his potent spell, toils on for him without sleep, without rest, without food, and enables a single mind to exert productive energies, which, without its aid, would require the labors of ten thousand hands. He learns the habits and the instincts of the lower animals, and subjects them all to his empire. He modifies their original characters, and makes useful servants of those which, untamed, were unserviceable or even noxious. He studies and comprehends his fellow-men, makes their passions subservient to his own, makes his interests coincide with theirs, enlists their sympathies in a common cause with his, and makes himself happy

by promoting the general welfare and happiness. He looks within himself, and discovers that he possesses, independently of all external helps, the means of a calm contentment, which the world can neither give nor take away. Upon this basis he rests, here he founds his confidence, which no tempests of misfortune can shake, no torrent of adversity can tear from him. By honesty, by honor, by avoiding every act and word that will bring after it remorse or shame, by meditating upon and following after whatsoever things are lovely and of good report, he preserves and cultivates his own self-respect. By communion with God and with his own thoughts, he purifies, exalts and enlarges his faculties and becomes truly wise, saving himself from every vice and from every misery which is the result and consequence of vice. Those lesser afflictions which still trouble him, because they are part of the lot of humanity, compared to those from which he escapes, are but the small dust in the balance. Whatever the world may think of him, however the fortune of the world goes with him, he is master of himself and of his fate, he has in his own breast all the elements of a tranquil felicity. How different is the condition of that man who is still in his pristine state of ignorance. Nature has no charms for him, no blessings in store for him; he sees no beauty, he perceives no harmony; all sweet influences are lost upon him, all the propitious intentions of nature are frustrated by him. He pursues phantoms that only mock him, and where his expectations are highest, his disappointments are most grievous. He lives in a continual struggle with the eternal order which he does not understand, and is always defeated, because he always attempts what it is impossible for him to perform. Most clearly then, in the most extended sense, knowledge is power, and without it we have no other power, we are like children exposed in a desert, there is nothing on which we can place reliance, or to which we can look for assistance, we are isolated and helpless.

We can now answer the question, in all calculations of interest, what is it that governs the conduct of men. It is the desire which every one has of increasing his portion of happiness: and according as his views of the course to be pursued are more or less correct, his exertions will be well or ill directed. If he sets his own interest in opposition to the true interest of the world at large, he will fail of accomplishing his object, and, in proportion to the extent of his influence, he will occasion injury to others. If he makes his happiness consist in that which can be pursued without diminishing the enjoyments of others, if he violates no

law of physical or moral nature, if while he prospers in his own enterprises he thereby contributes to the well-being of his fellow-creatures, he will encounter no antagonist principle, he will make auxiliary to his purpose all those principles in conformity to which he acts, and he must succeed in his design so sure as the laws of nature are constant in their operation.

Let us now consider, *very briefly*, since the remarks already made have occupied so much of your time,—let us consider what are the rules of morality. As every man's motive of action is to increase his own happiness, it is evident that he will approve of that conduct in others which most strongly tends to this result. It is equally evident that if we will have general rules they must have regard only to the general effect of actions. It is evident also, that mankind must either govern themselves by *general* rules, or not at all. A rule which is made for a single case, is no rule. To be able, without rules, to make special decisions for particular cases, all mankind must be philosophers; and of all men, philosophers, I believe, are the least inclined to make special decisions, and will most cordially recognize the absolute necessity of general rules of action. Mankind have long been sensible of this necessity, and have tacitly, and perhaps I might almost say instinctively, acquiesced in this conclusion. The wisdom of many ages has been embodied in a system of rules, which experience from time to time has taught us to improve, which rules the whole community holds that each individual ought to observe. They are such as allow every one to pursue his own advantage, but not at the expense of his neighbors. They allow every one to push forward himself, but no one to interfere with another. They are such that any infraction of them is at once seen and felt to be detrimental to society, without any uncommon sagacity or great depth of penetration. The whole pith and marrow of them is briefly comprehended in that maxim sanctioned by the founder of Christianity, "to do unto others as we would that others, in exchange of circumstances should do unto us."

Morality provides for the doing what most conduces to the good of mankind. It is all included in that new commandment of the Saviour which seems to be the fundamental principle of his system of social duty, "Thou shalt love thy neighbor as thyself."

It may be expressed in one word—Philanthropy.

How simple then is the part we have to perform in the world. Two commandments enjoin upon us all our duties: to love God

with all the heart—Religion : to love our neighbor as ourself—Morality. These two are inseparable : we have the word of an apostle for it, who assures us, that a man cannot truly say he loves God, so long as he hates his brother. Let us then show the sincerity of our love to the Father of the human race, by doing all the service in our power to his intelligent offspring.

- Independently of all religious considerations, what inducements, discoverable by intellectual education, has every man to be moral ? The remarks already made enable us to answer this question.

As it is the common interest of mankind, ascertained by experience, which has so established the conventional rules of that morality whose essence is incorporated in our nature, as to cause them to be admitted in theory even by those in whose hearts the love of goodness finds no place, he who deviates from these rules is recognized at once as a common enemy. If the deviation is great, alarm is excited, or passion roused, and society declares war against him : I speak not so much of what ought to be, as of what is. If it implies meanness, and depravity, he is shunned and detested. If it has been described, and forbidden by the authority of society, the majesty of the law steps in and inflicts the penalty. Lesser offences which neither are restrained by law, nor visited by public indignation, have notwithstanding, their appropriate punishment. No man can with impunity set himself in opposition to the general will.

In the unequal contest, however extraordinary may be his powers, he must be overcome. Humanity never fails to avenge herself whenever her rights are outraged, and the perceptibility of injury, when any moral law is infringed, is wonderfully nice. It seems almost to be an instinct given for self-preservation, and infallible in its operation. Often also it occurs, so admirably are the different parts of this universal whole adjusted to each other, that he who transgresses the regulations which nature prescribes, directly and in the first instance, injures himself, as well as his neighbor. This is especially the case with the intemperate indulgence of the appetites and passions, a large class of vices of different degrees of guilt, and bringing after them a great variety of sufferings. He that proposes to live according to the letter and spirit of a strict morality may rest assured, that he not only may, but *must* perfect his health, both of body and mind, by a rigid observance of the rules of physical and moral education, and that he cannot innocently contravene any precept of physical or moral hygiene. Temperance, in abstaining from too prodigal a use of the good things of this life, temperance in controlling the violence

of our passions and desires, temperance in forbearing to cultivate any favorite faculty to the neglect of others, and so as to destroy the balance of our powers—all these are necessary and have their recompense; but if we will not submit to their wholesome restraints we must expect and abide by the consequences of our folly.

These consequences are inevitable. We cannot avert them by skill, or by industry, and we must expect no exceptions in our favor. If it is hard to oppose the general interest and will of mankind, it is still harder to fight against the constitution of nature, and the ordination of God. Resistance is unavailing; we have only to yield a hearty acquiescence: to obey is to enjoy; to resist is to be miserable. The meanest understandings can receive these truths; wise men in all ages have proclaimed them: it is the voice of universal experience, that "the way of transgressors is hard." Every day's observation confirms the fact, and supplies us with new proofs and illustrations. Wisdom cries without, she utters her voice in the streets, how long will fools hate knowledge? All the warnings of providence are so many admonitions of the danger of vice; the whole course of events is full of lessons of virtue. Honesty is the best policy, says the worldly man, calculating the chances of gain, and judging like a shrewd observer of the habits and interest of mankind. Virtue is the only true good, echoes back the stoic sage, taking a nobler and a broader view of what constitutes happiness. Wisdom's ways are pleasantness and all her paths are peace, says the wise man of old, and the teacher of a later dispensation adds his testimony, the path of the just is as the shining light, that shineth more and more unto the perfect day.

Thus much for those who look only at the outside of things. These are the obvious and external motives which urge us on every side to live as a well directed conscience would lead us. But this is not all, higher and more worthy hopes inspire us; rewards more glorious, as well as more certain, are held out to us. Those who with patient and long-suffering endurance, striving to have the complete mastery over themselves, seek for glory, honor and an incorruptible crown, enjoy in this world and before their combat is over, much of that peace which the world cannot take away. There is no need to hold out to such men any hope of worldly gain, the voice of approbation in one's own breast is better than lucre. There is no need to threaten them with the loss of other men's esteem, they have that within that is dearer to them than the applause of a multitude. Do they need any

protection against temptation to crime? They know that crime is followed by the loss of that feeling of self-respect, that consciousness of integrity, that lofty sense of honor, which they have earned by a life of rectitude, and which they will not throw away for any unsatisfying weakness. I call it weakness, for he who yields to temptation is ashamed that he has not strength to resist, and his sense of degradation makes him wretched while he yields. Remorse follows crime with a terrible retribution. Remorse which its victim cannot escape, till his soul is steeled against feeling, and till he has ceased to be sensible to all the pleasure arising from an act of virtue, in the same proportion that he is callous to the pain which accompanies and follows the debasement of vice. When his finer sensibilities are dead, he finds relief from the torment they inflicted on him; but the remedy is infinitely worse than the disease. He has eradicated the seeds of goodness from his breast, he has destroyed his capability for the most exquisite happiness. He that is dead to shame is dead to virtue. He that is dead to virtue is dead to intellectual and moral enjoyment. His animal enjoyments he may still possess in common with the beasts, but he retains a capacity of misery vastly above theirs.

We now perceive, and the conviction forces itself upon us with irresistible plainness, that the inducement every man has to be moral is that otherwise he must be miserable. The rule of conduct is that every man best consults his own good by consulting the good of mankind. We can now go one step further, we may not only assert that knowledge is power, but also that **KNOWLEDGE IS VIRTUE.**

It is knowledge which constitutes the essential difference between different men and also between different nations. It is the correct understanding of his own true interests that makes one man happily virtuous, and it is because he is not thus enlightened that another becomes unfortunately vicious. In one nation, brutalizing superstition, abject poverty, and veneration for ancient abuses forbid improvement, and keep the people stationary in the first stages of their natural progress, so that generation after generation drags out its wretched existence, toiling barely to support life and to secure a few of the baser animal gratifications, because no ray of knowledge has pierced the thick darkness which envelopes them, to discover to them any more substantial good, or to enlarge the narrow horizon which limits their experience, their desires, their hopes and their pleasures; while in another nation each succeeding generation, inheriting the

full capacity for happiness which its predecessors possessed, opens for itself new sources of enjoyment, till it reaches the most refined and exalted, diffuses their blessings till they become accessible to countless multitudes, and thus purifies their passions, advances them in virtue, and raises them in the scale of moral and intellectual being, because the divine light of science has illuminated their minds and has shown them the inducement, the means and the practicability of being happy. Thus one nation grovels in slavery, because it does not know its rights; another preserves but a small portion of liberty, because it knows not how to defend what it has obtained, or to regain what it has lost; while another exults in the unrestrained exercise of its energies, because it knows what freedom is, and knows how to value and to guard it. It would be no difficult task to show you that our fathers were duly sensible of this great truth, and that therefore, anticipating the evils which ignorance would inevitably bring upon their posterity, they established an institution singularly well calculated to perpetuate general information, in the hope that we should not suffer the flame of knowledge to expire, but rather keep alive the sacred torch, and hand it down from age to age with undiminished lustre.

Our system of common schools however, though it furnishes to our whole youthful population, an opportunity for acquiring those rudiments of knowledge which are to be regarded rather as the means of something better, than for any intrinsic value they themselves possess, is as at present administered, defective, if considered as a provision for national education; and altogether incompetent to answer its purpose, if it is resorted to in the expectation that it can prepare its pupils to become, I will not say scholars, or statesmen, or philosophers; but practical business men, or intelligent, independent citizens. It is important that all our children should be taught to read, since the knowledge of letters is the key to all other knowledge. It is important also that they should be taught to write, since ideas can be extensively communicated or permanently recorded only by means of written language. But he who knows this only is no wiser for his knowledge. The ability to become acquainted with the thoughts of others, may make ignorance more unpardonable, but unless profitably employed, will not remove it. The ability to communicate our thoughts to others, or to preserve them for ourselves can be of little value, unless we originate or acquire thoughts which deserve to be communicated or preserved; and this the meagre supply of the fragments of a

few sciences with which our public schools furnish us, will hardly enable us to do. The implements of acquisition therefore, which are nearly all that our institutions at present gratuitously afford us, become valuable only to those who make diligent use of them, and exactly in the proportion in which they make use of them. The wisdom which is to guide us through life, which is to direct us in the choice both of ends and means, and to give us judgment to perceive and embrace opportunities, and capacity to accomplish objects is not to be learned at school. It is something of a higher order, and for which we must go farther into the nature of things. It is something which every man must, at present, acquire for himself, with such mutual aids as men by association derive from each other, or be content to wander through life the creature of circumstances, and the sport of fortune. It is Self-Education which must store the memory with materials for profitable reflection, it is self-education that must form and consolidate the judgment, and that must sharpen and quicken and invigorate the mental faculties. All this we must do for ourselves, for no one else can do it for us. But although we must be active in doing our own work, and not expect to remain passive and have it done for us, yet in this as in every other undertaking, we may do much to assist others in their progress, and may derive much aid from their cooperation with us. The intellectual powers, it is true, are strengthened chiefly by their own exercise, but men may combine together to concert occasions for exercising them. And in this way they will be more likely to proceed pleasantly, as well as profitably, and by witnessing each other's progress, and encouraging one another, to persevere to some good effect. Conversation elicits ideas; the collision of opposite opinions strikes out new veins; discussion develops the various arguments, so that the judgment may decide with the whole field open before it. That the mind should thus refresh itself with this friendly contest, where victory is gain to both parties, and defeat loss to neither, is the most eligible mode that can be conceived of testing its growing capacity, of familiarizing it with the comparison of conflicting principles, which must sooner or later urge their diverse and irreconcilable claims to its assent, and of enlarging and emboldening its just self-confidence. The lyceum begins where the school ends. Its office is to perfect what the school has prepared. Elaborated by its wholesome agitation, the unseemly ore of barren facts is made to yield abundantly the pure gold of practical wisdom and sound philosophy. There is no magic

in the process ; it is the ordinary operation of nature. The lyceum is a mental gymnasium. It is here that the young candidate for intellectual superiority must acquire the habits of investigation by which the truth may be sought and won, and the arts of offence and defence by which it may be made to exert an influence on others, and to maintain the moral dignity and self-respect of its possessor. Though the school may put weapons into his hands, and may teach him their names, it is here that he must learn how to use them. Nor will he find this training to be labor thrown away when he begins to act his part upon the stage of busy life. He will find occasion then for habits and for energies which it needs all the discipline of this institution, through all the forming period of his youth, to confirm within him : the time he has spent in preparing to play his part manfully, he will never regard as time lost ; he will only regret that he had not practised more. He who would hold and defend opinions of his own, in these stormy days of controversy, must descend into the arena a gladiator armed at all points. He that would act according to his honest convictions of right must be content often to be set down as acting wrong, unless he is always ready to give an answer to him that asks of him a reason. And what is that man good for who either has no principles of his own, or having them fears to live according to their dictates ? Can he respect himself ? Can he look for any respect from others ? Most assuredly not. The consciousness of his inferiority before the upright and conscientious man of independence, oppresses the time server ; it makes him wish that he could sink into the earth. Scarcely less contemptible is the timorous partizan of other men's notions ; who, knowing nothing himself, adopts blindly the views of those with whom chance brings him in contact ; who with honest intentions, is made the instrument of the designing, and the victim of the crafty ; who, having no chart to steer by, suffers himself to be blown about by every wind of doctrine ; who spends one part of his life in endeavoring to correct the mistakes which he should have avoided in another, and dies leaving his work unfinished ; who nullifies his own influence by perpetually undoing what he has done, and who cannot be respected for the purity of his motives, because we despise him for the inconsistency of his conduct. He who cannot think is an idiot ; he who will not is a bigot ; he who dares not is a slave : and he who thinking right, acts wrong, is without excuse or palliation a villain. The lyceum furnishes our young men with almost their only opportunity to cultivate

in themselves that acuteness and precision of thought which give the judgment a decided temperament, while it fosters also that firmness of purpose which is the natural result of an habitual reliance on one's own conclusions, and which conduces so much to confer a tone of independence on the whole moral character.

If ever there was a time when it might seem peculiarly incumbent on every man about to enter on the active duties of manhood, to qualify himself to perform those duties understandingly and efficiently, and with a high and holy aim to the welfare of his fellow-creatures, that time is surely no other than the present. If ever there was a nation upon whom devolved much of duty to be discharged for the benefit of other nations, it is our own. If ever there was a people among whom it behoved every individual strenuously to exert himself for the advancement of the general improvement and for the safety of the common cause, it is ourselves. For those whose lot was cast in the times of universal ignorance, for those who now groan beneath the heavy yoke of castes, oligarchies and hierarchies, but little can be imagined to stimulate them to acquisition, or to action. Why should a man open his eyes, if he must behold about him nothing but degradation and misery? Why should he study the history of his race if that history is only the record of its sufferings, and its crimes? Why should he speculate on its coming fortunes, if the prospect before him is all dark and lowering, if the future threatens but to repeat the past? But now when the world is awakening to its true interests, when a new morning has burst upon the astonished nations, hope has arisen from the grave where literature, and science, and common sense, and philosophy were buried with her for so many ages. All is not lost. Experience is no longer to be but a prophet of plagues forever boding ill. Prudence shall no longer confine herself to her single lesson, Forbear! Attempt not good, for in so doing you shall assuredly effect evil! She has abandoned her ungenerous doctrine; she walks hand in hand with philanthropy: she is not afraid to proclaim in the highways and public places that better days are in store for us. Mankind begin to know their friends, and to mark their enemies; and henceforth he who would ensure their favor must take his stand among the doers of good, and not as has been the case in the infancy and childhood of the world, among the doers of magnificent evils. But a little while and the purple garb of war shall cease to be a robe of glory. Wars of conquest will be ranked with assassinations for plunder; and the ambitious for fame will employ their tal-

ents to enroll their names among the benefactors, and not among the destroyers of their species. There is much to encourage benevolent enterprise ; much to stimulate honorable ambition. Every quarter of the globe exhibits evidence of improvement, and promise of more rapid advances. The races of men hitherto inferior, whether from constitution or from circumstances, are disappearing from the face of the earth, and giving place to those possessed of higher capacities both of virtue and enjoyment. The Saxon family, carrying with them the love of freedom which is a part of their nature, the language of freedom which is their inalienable birthright, and those free institutions, which, through centuries of bloody strife, their fathers have secured and perfected, have planted their colonies wherever agriculture could find a soil to cultivate, or commerce products to barter. Under the burning line, beneath the frozen pole, among the crowded millions of Hindostan, or over the desolate wastes of New Holland, along the sultry coasts of Guinea, up the late explored current of the Niger, in the salubrious climate of South Africa, over the vast expanse of the North American continent, you find them every where, and wherever you find them industry and enterprise, intelligence and virtue, civilization and freedom are their inseparable companions. But the great comparative increase of the white race, and the unparalleled rapidity with which the Saxon branch of that race spreads and multiplies, are not the only symptoms of a great and lasting amelioration in the condition of the human family. The great European Revolution now going on, not steadily, but with throes and spasms, cannot cease till society has assumed a form more propitious to the well-being of all its members. When governments shall be administered in the interest of the governed, then we may hope that there will be no more convulsions, since then there will be no cause to produce them ; but till then oppression will beget resistance. The people never complain unless they suffer, submission to light burthens being much easier than revolt against them ; but, so long as they suffer, they will, and they ought to risk even the most hazardous and costly experiments to alleviate their suffering. The cause of the people will ultimately prevail, and this result infallibly must come, because the universal diffusion of intelligence is fast carrying the moral influence into that portion of society where the physical strength has always been. Let us reflect that hitherto the interests of governments, over most of Christendom, even, have been adverse to those of the people, let us count upon the certainty of

an opposite order of things, and then set limits, if we can imagine any, to the benefits which must grow out of this fundamental change. Hitherto, great minds have arisen in rival nations, and devoted the highest order of talent to counteract and to thwart each other. Hereafter, they will serve the people, and as the interests of the people are the same every where, they will assist each other in devising and effectuating measures for the common good, and the world will reap the product of their joint labors, instead of incurring the mischiefs that flow from their eternal strife. Hitherto, neighboring nations have looked upon each other as natural enemies. Hereafter, as the true principles of political economy are more and more understood, they will regard each other as natural friends, and will recognize, as fully as neighboring towns now do, that they are injured by each other's depression, and benefitted by each other's prosperity. Hitherto, the governors have looked upon the mass of the people with jealousy, and have retarded their improvement, lest they should be forced to relinquish to them a share of their power. Now they must take their places in the front, and lead the onward movement, or be trampled under foot in its irresistible progress. It is because knowledge is power, that the people so long as they could be kept in ignorance, were easily held in bondage: it is because knowledge is power, that everywhere as they become enlightened they become free. When they see that they are many and their masters few, that they are strong and their masters weak, that they have common interests and may act in concert as well as their masters, they shake off their chains. It needs but a single effort of volition, and their slavery is terminated at once and forever.

Knowledge is power in the individual, in the state, in the nation. Knowledge, taken in that broad and comprehensive sense in which it constitutes true wisdom, Knowledge is Virtue. If, under the guidance of virtue, the different elements of power unite harmoniously in impressing upon the government one common impulse, the whole machinery of social order will move on steadily without starts, and stops, or jars.

A self-governing people without education is an impossibility; but a self-governing people imperfectly and badly educated, may continually thwart itself, may often fail in the best purposes, and often carry out the worst. More especially will this be the case, if the power of wealth, and the power of knowledge, failing to cooperate because one or the other is placed in a false position, act in destructive contradiction to each other.

The power of wealth is vast, so much so, that a great majority of the political writers of authority, in every age, have imagined that it must naturally and necessarily have the controlling influence in every state. Some very sagacious publicists, judging rather from the history of barbarous and imperfectly civilized people, and of the Gothic or feudal monarchies of Europe, than from the general principles of human nature and the capacities of society under more favorable circumstances, have even gone so far as to assert without qualification, that the holders of landed property must always direct and dispose of all other classes in the community. Where poverty is universal, except only among the landholders, and where ignorance is equally universal, except only with a few priests, and the latter dependant on the former, the monopolizers of the soil must certainly monopolize the power. But there seems to be no magical peculiarity in landed property to carry all power with it, after numerous classes have made themselves intelligent, and after other kinds of wealth have come forward to claim and exercise their share of influence.

The diffusion of information by means of the printing press, and improved facilities of intercourse, has created two new powers in the social system, the Mercantile and Manufacturing interests, whose existence was hardly felt politically before the fifteenth century; and the further operation of the same cause, at a still later period, has brought into notice an interest of preponderating importance in any fair estimate, but almost entirely overlooked for ages, because education had not given it a voice,—the interest of labor.

Since these organic changes in the very constitution of society itself, the distribution of power has undergone corresponding changes. The old learning upon the supposed connexion between land and power is altogether obsolete in the United States, and to a great degree will soon become so in Great Britain and France, where it already requires to be much modified to retain any semblance of truth. The abolition of entails, and a statute of distributions, will indeed do much to prevent, or help to break up a landed aristocracy; yet these and all other government measures devised for the same end are only symptoms, and by no means the causes of the spirit of change, a spirit which is not evoked by government, but which, at the bidding of a superior energy, roused by a more potent spell, with irresistible force, hurries government along with it, helpless under its influence. The causes of the series of revolutions going on since the downfall of the Roman Empire, and now working out for the last

three and a half centuries, with a rapidity constantly accelerating, operate much deeper than any measures of government. Their roots penetrate down among the fundamental principles of human nature, and there originate the mighty movements which are transforming society, it might almost be said mankind.

Here, where the sovereignty is in the whole people, they must fit themselves to be wiser and better sovereigns than any race of kings upon whom history has yet set her seal. How else are these universal movements to be directed? Every citizen must be educated first by his parents, then in the public schools, and afterwards by his own efforts, conscientiously to discharge his private and his public duty of self-government. By how much the more strictly he governs himself, according to the rules of the most comprehensive virtue, in his individual capacity, and as a private duty, by so much the less will he need to be restrained by the government without him, to curb his disposition to encroach upon the rights of others.

If the mere form of the government confers power on the classes with whom the Constitution nominally deposes power, the ballot of every voter is equal to each other ballot, and among us the most numerous class of voters consists of those who could not enjoy the right of suffrage under any other institutions than our own. If knowledge, in a higher and a nobler sense is power, our common school education is imparting to the whole people, in their childhood, choice and wholesome knowledge, partial knowledge carrying the vice of imperfection with it, or false knowledge, cursing its victims with artificial propensities to mischief and misery, according as the system is well or ill administered; our newspapers, countless as the leaves of Vallambrosa, good, bad, and indifferent, are the people's books with which they continue the process of mental and moral self-cultivation; and our institutions, with their frequent elections and never ending discussions, are the great Lancasterian school of the nation for mutual instruction in political science. If wealth is one of the forms of power, never was wealth before distributed among so many millions. Land is divided and subdivided perpetually; moneyed estates rarely remain for three generations together in the same family. Of the accumulations of wealth of every sort, but a very small proportion are hereditary; in most cases they are the product of the industry, skill, activity, and economy, of the present proprietors.

This point of the distribution of wealth is so important in its

various bearings on our condition and prospects, that it deserves a brief examination.

We have no landlords gathering the rents of territories extending as far as the eye can reach, and reckoning their tenants by thousands, and their income by hundreds of thousands. Our farms are sufficient to render the owner independent and comfortable, but not to surround him with a crowd of dependents. Our farmers, therefore, have all a common stake in the permanence of free institutions, and the government of just and equal laws; and instead of the ownership of land furnishing the elements of an aristocracy, as it does in most other countries, it is here one of the firmest bulwarks of liberty.

No more can our merchants, if they truly understand their own interest and that of their posterity, wisely desire to obtain an undue proportion of influence, as a class, in the community, because they are not a permanent body, and any unfair advantages or exclusive privileges vested in the class, which might at the present moment operate to the profit of certain individuals, would in a few years, by the turn of fortune's wheel, be perfectly certain to operate to oppress themselves, or at the farthest their children. Of the young men who from the country remove into the great cities to embark in mercantile pursuits, a majority fail before they have gone through ten years of their business life. Those who are born and brought up in the cities, have, as a whole, even poorer success, for they are not so generally educated in habits of industry, energy, and economy. Is this the material out of which to constitute an aristocracy? Would not the members of such a fluctuating body be fools and blind, if they did not resist every tendency towards partial laws, or any other species of favoritism towards their class, when they might well anticipate, each one, that he should be among the first to suffer under such injustice?

Nor does the manufacturing interest threaten any more to become the nucleus of a weighty and a permanent aristocracy. It lacks the element of firm, substantial power, residing for a length of years in the same individuals, and hereditarily in the same families. Within about ten years there has been a general bankruptcy of our manufacturing establishments; and if we look back twenty years, we may see most of them some two or three times ruined, or on the brink of ruin. Such an interest may at times be unduly favored by the partiality of other classes, but such advantages must be temporary, for it can never command them by its own unassisted strength.

Our capitalists are very few in number ; a few hundred in New England, and in the whole Union, they can scarcely be counted by thousands. Most of these are the children of poor parents, and many of them will be the parents of poor children. Half a century changes the names through almost the whole list ; every year strikes off some and introduces others. Their aggregate wealth is, at the highest, but a small fraction of the wealth of the community. In a state of general ignorance, the holders of masses of capital have an influence, not only disproportioned to their numbers, but also far beyond the proportion of their wealth, by the control they possess over mercenary talent : but, in a state of general education, the amount of talent developed is far too great to be bought up by any class ; a wholesome public opinion makes talent scorn to be mercenary, and its natural love of independence and consciousness of power, ally it rather with popular interests, where it is received with deference, than with aristocratic interests, which it is allowed to serve, as long as it will do task work for hateful wages. With free schools, and a free press, improved as both of them ought to be, and must be, if we duly prize our peculiar privileges, we need have no fear of the aristocratical tendencies of accumulated masses of capital.

There are two other interests, hardly known in other countries among those which influence the government, or which deserve to be regarded in legislation, but which popular institutions and universal education bring forward to their proper station ; the interests of talent and skill, and of labor, or personal strength. The former of these has the largest share of the power of knowledge, and the latter of the power of wealth.

The interest of skill includes all who live by skilled labor, of the hands or of the head, mechanics, overseers of various business operations, administrators of public affairs, authors, editors, and all professional men. This great interest is concerned that ingenuity and skill should be adequately rewarded, and well employed talent held in honor. For its numbers, its learning, its shrewdness, its activity, and its wealth, this class will make its influence more and more felt. It is more than any other the growing interest. Its power augments every day.

The interest of labor, always deserving respect for its numbers, has been trodden under foot from generation to generation, for the want of knowledge to make itself respected. With the physical force in its own hands, it has obeyed the weak, and sacrificed itself to their profit and glory. With arms in its

hands, and indomitable courage in its breast, it has fought the battles of the tyrants who were grinding it into the dust. The sons of toil have been marshalled in hostile ranks to butcher one another for the pleasure of their common enemies. With the sources of wealth in their hands, they have reserved poverty for their portion, and starved in the midst of the plenty they had created. The education of this class puts an end to these strange and unnatural phenomena. It enables the workman to eat the fruit of his labor. It happily precludes also the hostility between labor and capital, by enabling the laborer to command a fair share of the product of his labor, and by preventing him from demanding more than his share, lest he should thereby drive capital and talent from the pursuit in which he is employed, and thereby terminate his employment.

The remaining class, consisting of paupers, idlers, and criminals, has little or no influence on government. It is fortunately a smaller class with us than in any other country, and from the general tendencies of the times, it seems likely to become still smaller.

It would not be a mere idle speculation to inquire into the proportionate importance, measured by a pecuniary standard, of these several interests. Let us take the State of Massachusetts for the subject of the inquiry, and in doing so, we make that selection which shows to most advantage the property classes; this State having, from its dense population, brought into cultivation more of its land, and gone more largely into mercantile and manufacturing pursuits, and the mechanic arts, than any other State, in proportion to its numbers.

If by wealth we understand the power of commanding articles of comfort and luxury, and the various accommodations which money will purchase, it is plain that for the purpose of our comparison, we must regard those as equally wealthy who possess an equal fund of this power; no matter whether they hold it in the shape of muscular strength, practical talent, productive acres, or hoarded gold.

In Massachusetts there are seven hundred and twenty thousand inhabitants, among whom are one hundred and eighty thousand able bodied men capable of earning by their labor, upon an average, three hundred dollars a year. This is not too high an estimate, when we throw into the account all the labor done by women and children, which we shall not reckon separately, and all that degree of skill involved in various kinds of labor, so that it cannot be distinguished, and where the labor,

and not the skill, is what is principally paid for. Each pair of working arms, therefore, if we reckon but a hundred and eighty thousand pairs in the State, represents an active capital of five thousand dollars, and the productive fund of labor in the aggregate is equal to NINE HUNDRED MILLIONS of dollars. This class, therefore, holds in its possession more wealth than any other, and this is true not only in Massachusetts, but in every State in the Union.

The interest of skill is not so easily measured. We have, however, facts from which we may fairly infer, that though of much less magnitude than that of labor, it is very far beyond that of capital.

A return of the products of industry in Massachusetts, made last year to the Secretary of State, exhibited a total of more than eighty-two millions of dollars. It is true, that in this return, no allowance is made for the cost of the raw material of the manufactured articles; but neither did it include the products of agriculture generally, nor the earnings of commerce. Making the proper allowance for these particulars, it cannot be doubted that the value created by the productive industry of the State, in one year, exceeds one hundred millions of dollars. Of this sum, fifty-four millions are the wages of labor; about eighteen millions are the wages of capital; and there will remain therefore about twenty-eight millions to be the reward of talent, skill, and ingenuity. So that this is, if measured by a pecuniary standard, clearly the second great interest in the community.

Of the accumulated property in the State, amounting to three hundred millions, considerably more than half consists of real estate, a smaller proportion constitutes the wealth embarked in commercial and manufacturing pursuits, and the least share of all exists in the shape of moneyed capital. If this is the case in Massachusetts, richer in moneyed capital, in proportion to her numbers than any other State in the Union, it is still more so in every other State.

If these premises are correct, and they are as nearly so as they can at present be made, the productive fund which yields the annual income of Massachusetts may be thus estimated:

Labor worth,	- - - - -	900,000,000
Skill and talent worth,	- - - - -	466,666,666
Accumulated property worth,	- - -	300,000,000
		<hr/>
Making in all,	- - - - -	\$1,666,666,666

In what other country under heaven is industry and talent so rewarded? Assuredly, nowhere can they boast of such rewards as in New England; for these advantages are common, though in different degrees to all the New England States. And to what cause does New England owe this enviable superiority? The superiority of education, diffused by her common schools through her whole population, has enabled her to overcome the resistance of her inclement climate and her barren soil, and thus nobly to distance all her rivals in the career of improvement.

This have common schools done, but they have not yet exhausted their power. They are as yet only the rudiments of an institution destined to mould anew the character, to create anew the fortunes of the nations. He who measures their influence starts back in astonishment at the magnitude of the results already realized. He who considers what their influence might be, is no less astonished at the waste of our means, and the neglect of our resources. I hesitate not to declare my undoubting conviction, that throughout New England, we do not reap one tenth part of the harvest of benefits which our schools are capable of yielding us. I know, and I pledge my reputation on it, that a boy, twelve years old, and of average capacity, can be taught more of useful knowledge, better business habits, and better intellectual and moral habits, in two years, than our children ordinarily acquire between the ages of four and sixteen. What a fearful treasure of talent wasted, time misspent, a people's best energies dormant and none to awaken them! Never was a reformation more imperatively demanded by every interest and every duty than in our common schools. A century ago they were a wonder and a praise, but now they are behind the age. They have made us what we are, but they have also enabled us to discover what we may be, what we ought to be, what we shall be, if we remodel our schools to meet the wants of the times. It is not enough that the schoolmaster is abroad, unless the schoolmaster is furnished and prepared for his vocation. No man pretends to play the violin, or the piano, until by long practice he has mastered its chords, or keys, but of those who undertake to operate upon that most complicated of all instruments, the human mind, how vast a majority are totally unacquainted with its nature and functions. What wonder at their ill success!

LECTURE I.

ON THE

PHYSIOLOGY OF THE SKIN.

By JOHN GEORGE METCALF, M. D.

1871

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PHYSIOLOGY OF THE SKIN.

So little have the organic and functional laws which govern the development and preservation of our bodies been understood, that the term education has been almost universally used as appertaining solely to the development and improvement of the mind, without any reference to the mutual and reciprocal relations existing between it and the body which it inhabits.

When the important truth, that the full development of the mind can only be secured by the healthy and perfect development of the body, shall have become more generally and practically acknowledged, many of the systems of popular education, which are now so frequently proposed for the adoption of parents and teachers, will sink into total and deserved disrepute. That system of education which has no reference to the material dwelling-place of the mind, which labors for the expansion of the moral and intellectual, without regard to the coetaneous and due expansion of the physical powers of man, must, necessarily, be imperfect; because without the full and perfect development of the material organs, through which the mind manifests itself, that manifestation can neither be perfect nor complete.

We only judge of the existence of mind, in others, by those manifestations which are transmitted through the medium of a material organization; and it would be absurd to predicate its presence, in any given portion of matter, under any other circumstances. When the body is laboring under disease, we are all aware that the mind ceases to manifest itself with its wonted readiness and energy. And why? Because those organs, through which the mind operates upon what is external to itself,

are not in that condition which the mind requires for its full and perfect manifestation. To be sure we often say that the mind is sick and the intellect disordered, but we can only mean to be understood that those organs through which the mind acts, and by the aid of which only it informs us of the fact of its very existence, have become unfitted for the transmission of such intelligence; and not that the immortal mind which "suffers no decay and knows no death," is, in reality, laboring under the attack of disease. Do we acknowledge that the mind can be sick in any sense analogous to the sicknesses of the body? Then we must come to the conclusion that it may die like the body; and consequently be constrained to yield our assent to the cold and repulsive doctrine that it may perish in the same common grave with it.

If then the mind is not subject to disease, if it manifests itself only by the aid of a material organization, and if it be necessary for its full and perfect development that that organization be perfect, and in a certain condition we call health, then it follows that the more perfect and healthy the organization, the more perfect and manifest will be the development of the mind. This being true, we can readily understand of what vast importance it is that the cultivation of the physical powers should be attended to at the same time with the expansion of the mental. It is the neglect of this great truth, which every philosopher and philanthropist of the land should endeavor to abate and overcome; and until the principles involved in it shall have been reduced to general practice, all systems of education will be radically erroneous.

Human Physiology is the only true foundation of any rational system of Physical Education; for, if we do not understand the uses and functions of the different organs of which the body is composed, how shall we be able to decide upon that course of training and management which will best develope and preserve the body as a whole, and the different organs in particular? Physical education then is that system of management which best develops the physical powers and ensures their duration in health.

The human body is made up of different organs, differing in their elementary organization, and subserving widely different purposes in the economy of life. Of these, pursuant to the invitation of the Directors of the Institute, I shall only speak of the *skin*. I shall endeavor to explain to you, so far as the limits of the present lecture will permit, its structure and functions,

and point out some of the means by which the health of the body, so far as it depends upon this organ, may be best promoted and longest insured.

Intending to follow the example of brevity in their performances which those, who have heretofore lectured before the Institute, have set for our imitation, I am aware that I should bespeak your patience, while listening to the recital of much dryness of detail and plain matters of fact; and if, at the end of our journey, you shall find yourselves, in any way, rewarded for the exercise of that virtue, I can tell you, beforehand, that it will not be because I may lead captive your imaginations by any terse and rounded periods of oratory, but because I may have made you, in some degree, better acquainted, simply, with the admirable mechanism and important offices of a portion of your bodies. I build you no magnificent castles in the air to gaze upon, but will endeavor to tell you how "the house you live in," on the earth, may be best repaired and preserved.

The skin is that membranous covering which is expanded over the surface of the body, and serves the double purpose of binding together and protecting from injury the parts situated beneath it. It puts on different appearances in different animals and in different parts of the same animal. It is composed of three layers; called,

1. Cuticle, or scarf skin.
2. Rete mucosum, which is the seat of color, and
3. Cutis, or true skin.

The *cuticle* is the external one of the three layers. It is insensible, not being supplied with nerves or blood-vessels. It admits of exhalation and absorption. Its texture is homogeneous and transparent. It is originally thicker in those parts upon which pressure is to be made, as the palms of the hands and soles of the feet, and becomes still thicker and more condensed as the pressure comes to be applied. The hair and nails are produced from the cuticle. Its structure fits it admirably for its uses in the animal economy. Its insensibility protects the true skin from injuries it would otherwise receive at every movement of the body. It also impedes evaporation, thus preserving the true skin soft and moist, which condition is requisite to the proper discharge of its functions. It also prevents rapid absorption, thus enabling the body to sustain life for a considerable period when surrounded by noxious gases and exhalations.

The *rete mucosum* is the thin, soft, insensible layer interposed between the cuticle and the cutis, or true skin. Its use is to

protect the nerves and blood-vessels of the cutis, and conduce to their requisite softness and pliability. It is also the seat of color, and is found to be thicker as the color increases in intensity.

The *cutis* is the thickest of the three layers, and is by far the most important in its structure and functions. It is very copiously supplied with, if not almost wholly made up, of nerves and blood-vessels. Besides serving the purposes of binding together and preserving from injury the parts situated beneath it, the cutis performs various other important offices in the economy of life. These functions will be considered under the following heads.

1. As an exhalant of waste matter from the system.
2. As a joint regulator of the animal heat.
3. As an organ of absorption.
4. As the seat of sensation and touch.

1. Of the skin as an exhalant of waste matter.

So long as life lasts all organized beings are in a state of constant renovation and decay. New particles are continually becoming assimilated to the body, and others are as constantly being removed from it. Those organs which perform the office of removing this waste and effete matter from the body, are called excreting organs; and of these the skin is the most important one. Its excretions, ordinarily, passing off in the state of vapor, it is hence called an exhalant organ. Every one knows that the skin perspires, and that a check of perspiration is one of the most prolific causes of disease and death; but very few, I apprehend, are aware of the real extent and influence of this exhalation. The performance of this function is accomplished by the two following methods.

1. By sensible perspiration.
2. By insensible perspiration.

After a period of laborious exertion, particularly in warm weather, a copious sweat soon makes its appearance upon our bodies. This is called *sensible perspiration*. Sensible, because it can be appreciated by the senses. But by far the greater quantity is excreted and thrown off by the process of what is called *insensible perspiration*. Insensible, because the excretion, being in the form of vapor, and continually carried off by the surrounding air, the senses are not cognizant of its presence.

The *amount* of the insensible perspiration is still a vexed question, and it is not pretended that any thing more has yet been attained than an approximation to its real quantity. Sanc-

torius, who weighed himself, accurately, every day for thirty years, came to the conclusion that five out of every eight pounds taken into the system, passed out of it again by the skin. M. Lavoisier and Seguin, after a well-conducted and patient investigation of this subject, without taking into the account the quantity of aliment received into the body during the experiment, give it as their opinion that the *average amount* of the insensible perspiration from the skin is two pounds and one ounce for every twenty-four hours. Although experiment has as yet failed to establish the precise amount of the insensible perspiration, it has proved that it is more abundant than the united excretions of the bowels and the kidneys.

The quantity of insensible perspiration is increased after our meals, during sleep, in dry, warm weather, and by friction or whatever stimulates the skin. It is lessened when digestion is impaired and when we are surrounded by a cool, damp atmosphere. It will be seen that I have only considered what relates to *insensible* perspiration. That which is produced by exposure to an exalted temperature or violent exercise, &c. soon becomes *sensible*, and, for the time, far exceeds in quantity that which is the product of insensible perspiration. In this way, a hardy, robust man, may lose two or three pounds in as many hours. Chabert, the Fire King, in his hot oven, sweat quite as much as the beef which roasted by his side.

The average amount of the cutaneous exhalation, as proved by experiment, is a little more than two pounds for every twenty-four hours; and if this matter cannot find an exit at its appropriate outlet, it must either be retained in the body, or eliminated by some other organ of excretion. It must be retained after it has become unfit for the purposes of life, or it must pass out by the lungs, the kidneys, or the bowels. Either of these conditions cannot long be maintained and the health of the body preserved. That it cannot long be retained in the body without producing disease no one will dispute, and that if the other excreting organs are to be charged with the removal of the additional quantity which should have been carried off by the skin, it is equally true, that, sooner or later, disease will be the result. From this we can appreciate the importance, in our physiological researches, of studying the human body as a whole, and not confining our attention to the consideration of, perhaps, a single function.

Another general law of our nature is that when one organ is unusually delicate, either from some original defect or previous

disease, it is much more likely to suffer than those which are sound. Thus we see why a person who has once suffered from inflammation of the lungs is more liable to a second attack ; and why a few repetitions of the process produce that fatal malady, consumption.

This increased susceptibility to disease constitutes what is called peculiarity of constitution ; but beside this there may be, and often is, an original peculiarity of constitution constituting what is understood by the medical term idiosyncrasy. Hence in our physiological speculations we must not overlook the modification of function which these causes may produce. Hence also might be shown the importance of employing but one person as our family physician. Attending us in our ordinary sicknesses, he soon becomes acquainted with all our acquired and original peculiarities of constitution, and thus predicates his remedial plans for our relief with a full knowledge of all the conditions upon which their success depends. Having this knowledge, the physician can often adapt his prescriptions to the nature of the cause as well as to the disease itself. To explain. A bowel complaint, for instance, may depend upon a night supper of lobsters and cabbage, or upon an exposure to a current of cold air. Now although the disease is the same in both cases, still it is obvious the remedies should be different. In one case, a cathartic should be administered to remove the offending substance, in the other, something to induce the return of the insensible perspiration.

These considerations, one would suppose, commend themselves so clearly to the every-day common sense of the community, that it becomes matter of perfect astonishment that he who declares his one remedy, or even that steam and lobelia will cure "all the ills which flesh is heir to," should find so many to yield credence to the shameless affirmation. If you believe the title of what he tells you, man may be rendered immortal on earth, without the intervention of miracle, by only an occasional dose of the thousand and one elixirs of life, the very advertisements of which fill up, at least, half the columns of the whole newspaper press of the country. "Learned of the Indians," has become a talisman more powerful than the authority of Hippocrates. Backed by the omnipotence of so tremendous a charm, the dispenser of nostrums often finds a welcome and cordial reception where the profoundest research and the most extended observation can scarce find entrance. Why is this so ? Why is it that loud pretension often carries more weight

with it than modest, unassuming experience? Shall I tell you the truth in this matter? Let me tell you then were the public not equally ignorant with himself, their credulity would cease to afford to the presumption of the quack the abundant harvest he has so long fattened upon. It is but the want of a proper knowledge of the structure and functions of the "House we live in" which trusts every body and any body with its repairs. Give up then the squeamish and unreasonable prejudice against the practice of post mortem examinations. Release the physician from that ban of public opinion, of which the whole round of history furnishes but a single parallel instance in the barbarous treatment of the Egyptian embalmers. Suffer, aye encourage the village physician to come before you, in the long winter evenings, with the human subject for dissection. Let him explain to you its structure and its functions; tell you how it is put together, what are its uses, and how it may be preserved. Affect no longer a culpable indifference to the acquisition of that knowledge which, while it labors for the welfare of the mortal body, exerts no little influence upon the welfare of the immortal soul. In this way you will relieve yourselves from years of penal infliction, consequent upon the disregard of a few simple laws of universal application. You will have learned, in a short time, to put a just valuation upon that most inestimable of all God's blessings, a sound mind in a sound body. In the pursuit of this study you cannot have any thing to lose; but, on the other hand, you will come out from the investigation of your own bodies with frames renovated for the rude encounters of real life and minds far better fitted for the endurance of its multifarious trials.

But besides serving as an organ of excretion, the skin is also

2. A joint regulator of the animal heat.

With the most benevolent purpose the Creator has endowed animal life with the power of generating and modifying its own temperature. Even vegetable life, to a certain extent, is endowed with the same power. Experiment has amply proved the fact, that, under every possible variation of circumstances, compatible with the preservation of life, the human body retains, very nearly, the same temperature. Had man no power of adapting himself to different degrees of temperature, he must have been chained for life, to use the language of another, to the climate which gave him birth; and even then have suffered severely from the procession of the seasons unless endowed

with the instinct and ability of the migratory tribes. Endowed, however, with the ability of adaptation to various degrees of temperature, he can enjoy life amid the regions of external congelation or under the burning sun of the equator; he may spend his winters with Scoresby and Ross, shooting the polar bear with bullets of frozen mercury, and anon take a seat with the Fire King in his oven hot enough to roast the venison his winter pastime has procured.

Who does not remember the wonder of our spectacle-loving countrymen at the exploits of Chabert and the supposed mystery of his performances? And yet, long before his day, Sir Charles Blagden, and others, remained in a room, for some time, with the thermometer at 260° , which is 48° above the temperature of boiling water. All the mystery of these operations consisted in being ignorant of the laws which govern the generation and distribution of animal heat. Had these been understood, the whole matter would have been explained, and a simple and beautiful provision for the preservation of life would have ceased to afford even a living profit to the French adventurer.

The skin and the lungs are the principal agents in effecting this adaptation of the human body to such wide varieties of temperature. For present purposes we have only to do with the skin. Although all the causes of animal heat may not be satisfactorily assigned, we know that it is constantly generated and as constantly expended during the continuance of life; and that when more heat is generated, or more expended than ordinary, this disproportion of generation and expenditure operates as a powerful cause of disease and death. While we are asleep, and when engaged in moderate exercise, the insensible perspiration and the circumambient air, when cooler than our bodies, are sufficient to remove the surplus heat and preserve the equilibrium between generation and expenditure. But when the quantity of heat is increased, as during violent exercise, an increased expenditure becomes necessary. This is accomplished by an exalted action of the skin and lungs; and as both produce their effects upon the same principle, what is a fact with regard to one function may be predicated of the other.

In clear, frosty mornings, the superabundant heat is rapidly carried off by the cool air from the surface of our bodies and by the exhalation from the lungs, and then the insensible perspiration is reduced to a very moderate quantity. On the contrary, in a warm, dry day, little is lost in this way, and the

equilibrium is preserved by an increase of perspiration. Almost every one must have noticed the sense of gratification experienced in the transition from the dry, restless, and almost febrile heat which precedes, to the exhilarating and pleasant coolness which follows, the breaking out of a copious flow of perspiration. The fairer portion of my hearers will appreciate the truth of this remark, when they call to mind the refreshing sensation which follows the drinking of a cup of warm tea on a summer afternoon. How often have you heard the seemingly paradoxical observation repeated, that the warm tea makes one feel cooler. This holds true if sweating follows and not otherwise.

Physical evaporation alone, without the aid of any vital principle, is sufficient to carry off a great quantity of the matter of heat; and it yet remains a question, whether the process of equalizing the temperature of the human body is accomplished in any other way. Dr. Franklin was the first to suggest the idea, that one of the uses of perspiration is to reduce the animal heat; and he first pointed out the analogy between the process and that of the evaporation of water, in warm climates, as an efficacious means of reducing the temperature of the air in rooms, cooling wines and other drinks, &c. much below that of the surrounding atmosphere.

These principles being established and understood, it becomes plain and obvious why we are so much the more affected by heat in what is called close, muggy weather, and when there is little air stirring, than under opposite meteorological conditions. It is for the same reasons that warm and moist climates are so proverbially unhealthy. Evaporation is but feebly supported under these conditions, and the excretion of waste and effete matter from the system, by the function of perspiration, is also very much impeded. Hence fevers, dysenteries, inflammation of the bowels, &c. are prevalent, consequent upon exposure to such weather and climate.

What is called being *acclimated*, is but the adaptation of the human system to the various circumstances with which it is surrounded consequent upon a removal from one locality to another. Life is to be carried on under different circumstances and conditions, and it is only by rendering itself in harmony with these new circumstances and conditions that it preserves its existence. That it often fails to do this, and death ensues, is mournfully proved by the numbers of those who are almost daily disappearing, from the immediate circle of our friends,

and whose bones are mouldering in the cemeteries of the South. Strange, passing strange is it, that motives of gain or ambition should be followed at such fearful hazard, and that the hardy sons of New-England should be willing to exchange the bracing air of their native hills and their variegated landscape, for the pestilential breezes and pine-barrens of Carolina. But there is magic in the two words, sunny South; and it is the romance of this expression which operates almost with the power of enchantment. It is this talismanic phrase which entices so many of our citizens from the broad domain of their patrimonial inheritance, from the pure, moral atmosphere of the land of the Pilgrims, to swell the annual harvest for the garner of death in this same sunny South. When I die let me die at home.

New-England! with all thy faults, I love thee still."

3. Of the skin as an organ of absorption.

Absorption is another function of the skin, and the opposite of excretion or exhalation. Particles are said to be absorbed when they are taken up and carried into the blood vessels, either to become a part of the living organization, or to be eliminated from the body by some of the emunctories, as matter no longer useful in it. This process is performed by vessels peculiarly adapted for the purpose, and they have thus acquired the name of absorbent vessels. The contents of these vessels being transparent, or semi opaque, they are, on this account, sometimes called lymphatics. In the skin, and here the cutis or true skin only is meant, the absorbent vessels are so exceedingly numerous, that when they are injected with mercury, the skin is so completely filled that it resembles a sheet of silver. Vaccination is a familiar example of the principle of absorption. A minute portion of the vaccine virus is inserted under the cuticle upon the true skin, where, in a short time, a portion of the matter is taken up and carried into the general circulation. Endermic medication is accomplished through the medium of this cutaneous absorption. The cuticle is removed by a previous blister, and the medicament indicated is applied to the surface. The absorption is so rapid that the effect upon the system takes place nearly as soon as when taken into the stomach. This will not appear strange, when we recollect that medicine, as well as food, when taken into the stomach, only finds an entrance into the system by this same process of absorption.

Although absorption, under ordinary circumstances, takes place much more rapidly when the cuticle is removed, still it is

true, that the process is accomplished without such removal. The irritation of the urinary apparatus, occasioned by the absorption of the flies used in blistering, is a familiar, and, to those who have experienced it, a painful illustration of this principle.

It has long been known, that concentrated, animal effluvia, operate as a very energetic and destructive poison. Hence there is reason to suppose that disease is not unfrequently produced by the absorption of the residuum of the perspiration, confined upon the surface of the body, by improper clothing or want of proper and frequent ablutions.

It is a general law, that every organ acts with increased energy when excited by its own proper stimulus. Thus warm, dry air promotes exhalation, while a moist atmosphere is favorable to absorption. In consonance with this law, we find the inhabitants of low, marshy countries, as Holland, for example, remarkable for the development of the lymphatic system; while those who live in a higher and dryer region exhibit the opposite development.

If the cutis were homogeneous in its structure, we should have an insuperable difficulty in explaining its several functions, because it is true that an organ, homogeneous in its organization, can perform but a single direct function. But the skin is not homogeneous, being made up of different and dissimilar tissues. We have seen that the exhalant vessels compose one portion and the absorbent vessels another. To these is added still another tissue; I mean its nervous portion.

4. Of the skin as the seat of sensation.

The constituent portions of the cutaneous organization already spoken of, beside their other offices, also serve as a suitable surface for the distribution and protection of the nerves of the skin. All impressions received from without the body are transmitted to the brain by the agency of the nerves which terminate upon the skin. The skin, together with the organs of the other senses, as the eye, the ear, the nose, and the tongue, are but structures fitted to bring their respective nerves into a proper relation with those qualities by which their peculiar actions are excited. The surfaces upon which nerves are distributed enjoy no agency in the production of impressions. Thus, destroy the continuity of a nerve, and the apparatus by which it was enabled to take cognizance of qualities, so far as that particular office is concerned, is destroyed also.

There is no part of the body which is not abundantly supplied with the nerves of sensation. I say nerves of sensation,

because the labors of modern physiologists have proved that besides these there are nerves of motion ; each never interfering with the respective office of the other. Experiments in Comparative Anatomy have been made which conclusively establish this fact. Thus, destroy the continuity of the nerve of sensation which supplies the lips of the horse and he will not taste his provender, because he cannot feel it ; destroy the nerve of motion which supplies the same part and he still goes hungry, because, although he can feel his food, he has no power to carry it to his mouth.

We cannot but acknowledge the wisdom and goodness of God in this wonderful and universal supply of the nerves of sensation ; for without it our lives would hardly be protracted beyond the period of a single day. Were any part destitute of this property of sensation, its texture and vitality might be destroyed, and we remain entirely ignorant of it.

For the due exercise of this function various conditions are requisite. One condition is, the cuticle must be sound in order to the perfect exercise of the sense of touch. So also if the cuticle has become thickened by pressure or disease, the impressions made upon the extremities of the nerves will have become proportionally lessened, and, consequently, little information will be conveyed by them to the brain. A due supply of arterial blood is also necessary for the exercise of sensation. The child comes home from school in winter and tells his mother his fingers are so cold he cannot *feel* the buttons on his great coat. Why does he not feel them ? Because the snow storm or the north-west wind has carried off so much of the animal heat, that the blood has left the surface of the body for a warmer region nearer the heart ; thus depriving the nerves of the extremities of that supply of arterial blood which is necessary for the due performance of their functions. His mother helps him off with his great coat and sets him down by the stove to warm himself. Directly he begins to complain that his fingers are prickling and tingling so that he does not know what to do. The good mother tells him to rub them smartly and they will soon feel better. He sets about complying with the advice, and, in a few minutes, he has done with his fingers and is calling lustily for his supper. The rationale of this operation is summed up in a few words. The arterial blood disappeared from the fingers by reason of the cold, and sensation was lost in consequence. As the animal heat began to return to the fingers again, the arterial blood also made its appearance, and,

after the rubbing operation had been performed, the accustomed sensation was once more established. But why the prickling and tingling which was almost as bad as the cold? Because of this general law, that when a function has been obstructed, for a while, it acts with more than ordinary vigor when it again begins to perform its accustomed and peculiar office; and this is what is technically called, in medical books, reaction.

In health, sensation is a correct index to the real temperature of the body, but not in disease. Persons laboring under fever, for instance, often complain of cold chills, when the skin is actually warmer than usual. I once attended a patient, for some weeks, who made continual complaints that her hands were burning hot, so that she kept them constantly uncovered; while to my own feeling, and that of the attendants, they were as cold as ice, and her death, which soon afterwards took place, made no appreciable difference in their temperature.

There are some mental emotions which exercise a remarkable influence over the functions of the skin. The depressing passions, as fear, grief, &c. by diminishing the afflux of arterial blood to the surface of the body, render the skin pale, diminish perspiration, sensation, and the animal heat. On the other hand, the violent and exhilarating passions augment the amount of the cutaneous circulation.

Having concluded a brief exposition of the mechanism and functions of the skin, let us now consider how far the principles, involved in their government, may be rendered subservient to the purposes of real life; keeping in view the leading sentiment of the Benthamite philosophy, that knowledge is nothing worth any farther than it can be applied to the improvement and happiness of our race.

The physical education of children is almost infinitely varied, depending more on custom and prejudice than reason and observation. The child is nurtured, in a particular manner, for the unanswerable reason that its grandmother was so before it. As it is now, the whole physical education of the infant child is devolved upon the mother. She feeds and clothes it according to its supposed physical wants and necessities alone, never dreaming that her rules of regimen and dietetic management, have any thing to do with the development and culture of the mind. The tiny objects of our regard, in other respects, seem, in this matter, to be placed beyond the pale of our sympathy. We are for taking good care of those who escape the perils of infancy, and, in our haste to mature and perfect the man, for-

get that we have lost the best portion of our opportunities to make him one. It is time the community were set right in this matter, because there is no philosophy which can give us assurance that the errors perpetrated in infancy can be atoned for by any repentance of maturer years. One great fault is, that the father feels no concern with the nursery. It is all *terra incognita* with him. He seems to have got the notion, somehow or other, that his administration is divorced from all these affairs; and that he is only to be "a looker on in Venice," let things go never so badly. Besides all this, while we have treatise upon treatise, filled with the maxims of experience and the inductions of reason, upon the best means of preserving adult health, we have hardly a line upon the physical management of children.

Why is it that the destruction of human life is so great in infancy? How comes it that the bills of mortality prove the appalling fact, that one fifth part of the human race scarcely survive the first two years of their existence? It is not so with the brute creation; and can it be that God has imposed conditions upon rational and accountable man from which he has exempted them? This is not so. It would be taxing Infinite Goodness with the capricious disposition of the spirit of evil. It would be the pronouncement of a verdict of insanity upon the Allwise Creator of the universe. Let us look somewhere else then for the cause of this wide-spread desolation of human life. Let us cast about and see if its removal may not, in some measure, depend upon our better observance of those uniform and benevolent laws which were intended to govern in the development and preservation of our bodies.

One great cause of this mortality among children is the inadequate protection afforded the skin, affecting its direct functions of exhalation, absorption and sensation, and its indirect one that of regulating the animal heat. At birth the skin is delicate and extremely vascular, the circulation of the blood being mostly cutaneous; for, up to this period of its existence, the lungs, the stomach, the liver, the spleen and the kidneys, have not been excited to the performance of their appropriate functions. At this period then, exposure to cold is peculiarly dangerous. The insensible perspiration is easily checked, and the mass of the blood, circulating in the skin, is suddenly revulsed and thrown back upon the internal organs, producing intestinal, pulmonic and other inflammations, convulsions, &c. which sooner or later extinguish its enfeebled powers of vitality. Hence the practice of washing children and infants in cold water, or

exposing them to the cold air, cannot be too strongly condemned. The motive of this conduct may be good to be sure, but what of that?—if it be based upon error, the practice can no longer be justified, and should be forthwith abandoned. The popular notion, and encouraged too by many who should know better, is that this mode of procedure toughens the child. We have read that a cold bath rendered Achilles invulnerable to the weapons of his enemies, but we were never informed that it exempted him from the operation of the laws of nature. They therefore who would follow his example, with the notion of toughening their children against the impression of cold, may be assured that, at the conclusion of the experiment, they will be sadly disappointed.

But while we are careful about this early exposure of infants to the influence of cold, we should also take heed that we avoid the other extreme that of keeping them too hot. "*In medio tutissimus ibis*," is a maxim to which we should bow with deference in these matters; remembering that the human constitution can no better be preserved from disease by too high than by too low a temperature.

Children often lose their health if they are not carefully and frequently washed; and washed all over too they should be. These ablutions should be performed, at least, daily. Soft, tepid water, and some of the finer soap only should be employed. After washing, the body should be rubbed dry and the clothing put on as speedily as possible, so as to promote a healthy and vigorous reaction in the capillary vessels of the skin.

In adult as well as in infantile and adolescent life, the power of generating heat and resisting cold is different in different individuals. Scarcely two can be found exactly alike. Hence any general rule with regard to clothing can only be arbitrary. It would be manifestly absurd to require that one who, as the phrase is, hardly knows what it is to be cold, should wear as much clothing as one who is always complaining that he is almost frozen. The amount of clothing can only be properly regulated by adapting it to each particular case. So much should be worn as will produce a uniform feeling of comfort and no more. But we must remember that we are not to depend on clothing alone for the production of a sufficient degree of warmth. Exercise in the open air, bathing, friction and cleanliness, are all to be put in requisition for its accomplishment.

The notion of preserving health by obeying the physiological laws relating to one function and disregarding those which gov-

ern the other functions, has been the procuring cause of a vast aggregate of human suffering. One, having become convinced of the importance of dietetics, for instance, pays his whole attention to the stomach and other organs of digestion; and, with but little thought for the other functions of his body, thinks he has a fair prospect of health and length of days by eating of certain particular articles, cooked in a certain particular manner, partaken of in a certain particular quantity, and at certain particular times and seasons. Another, having got the notion that exercise is the principal thing, eats a hearty meal, of the "fat of the land," at ten o'clock in the evening, goes to bed at twelve, sleeps in a bed room, seven by nine, with the door shut and with three in a bed perhaps, and then believes that his accustomed and measured walk in the morning, will set all at rights again. Another, having listened to a philosophic explanation of the death of the one hundred and forty Englishmen in the Black Hole at Calcutta, has come to the conclusion that fresh air, and enough of it, will confer immunity from all sorts of diseases; and therefore he sleeps with his bed room window open the year round, and when he is, by and by, brought down with inflammation of the lungs or rheumatism, he wonders what it can all mean, he has taken such good care of his health. Another, believing that health depends entirely upon the attention he bestows upon the skin, spends an hour, morning and evening, undressed and in a cold room withal, scratching himself with a card or flesh-brush, and performs his ablutions with oriental exactitude; but nevertheless, eats any thing and every thing, in season and out of season, goes all day with his feet wet, by a slip in going from his house to his office, [which is but two doors off, and which is the extent of his daily perigrinations] and then, when the dyspepsia gets hold of him, he wonders what it can possibly mean, he has taken such provident care of his health.

These considerations prove the intimate relation and sympathy which exist between different and distant parts of the body, and show us that the healthy development and duration of that body, can only be insured by an observance of the fundamental laws which regulate and govern *all* its various functions.

Although the fabric and the quantity may be duly regulated, yet, in the dress of females, especially, there is another very weighty and serious objection; I mean its tightness. From the closeness with which it is made to fit the upper portion of the body, enclosing the most vital organs, and among these, one which

is the most liable to disease, it not only injudiciously confines the insensible perspiration, and prevents that free play between the dress and the skin, which stimulates the latter by every motion which the body produces, but it also lessens the vital actions of the nerves and capillary vessels of the surface, and, by consequence, the power of generating animal heat. I am aware that this is a subject upon which there is a vast deal of practical infidelity; and that, hitherto, conventional usage has thrown around it the panoply of its protection against the approaches of criticism. I have daily experience that the admonitions of prudence and even professional injunction, are but little regarded when this subject is the occasion upon which they are delivered. The tyrant, Fashion, rules, in this matter, almost with the power of omnipotence. Her dictates carry with them the authority of despotic rule, with somewhat, I fear, of the distinctive peculiarity of the laws of the Medes and Persians, that they change not. But still, even at the risk of the charge of rebellion against her authority, I cannot pretermit the opportunity which the present occasion affords, my fair hearers, to warn you against this most pernicious and dangerous practice. Let me tell you in kindness, that this custom of tight lacing, is the prolific source and fountain of many of those diseases which embitter, aye, and most fearfully shorten, the existence of so many of your sex. Collate and compare the bills of mortality, and be admonished, I beseech you, by the frightful and accumulating evidence they will afford.* You will find that consumption, fatal consumption! stands highest in that appalling registration of human woe, in the number of its untimely victims. Victims too, the great mass of whom, are selected from those we most love and cherish upon earth. Like the Nero of a Roman triumph, consumption chooses the captives which are to grace the procession of her calamitous exodus through the land with the skill and judgment of a connoisseur. She rejects with scorn enfeebled age and puny youth, and chains to the wheels of her triumphant chariot none but the brightest and fairest and foremost of the earth. Say not that this picture is but an example of rhetorical flourish, or that it is but a fancy sketch of an over-anxious solicitude for your welfare even. Before you turn a deaf ear to the voice of reason and the admonitions of experience, look around, I pray you, even if it be only in the little circle of your own personal acquaintance; and sum up, in your recollection, the number of shining marks which have been smitten down by the conqueror. How do they tally with the numeral exaggeration of which you

were almost ready to accuse me? Do they exceed or fall short of the frightful proportion? Do they exceed? Then so much the more reason why you should take warning by the faithfulness of the calculation. Do they fall short? Abate your confidence by the sum of the difference then, and judge ye if not enough remains why you should no longer withhold the influence of your precept, aye, and your example too, in breaking up this fatal habit. I am aware that unwelcome truths bring little thanks to him who utters them. I know that he who wars with long established customs and practices, though sanctioned only by caprice and folly, finds but few allies to assist him in the unpopular warfare. He must fight single-handed and alone; and, at the topmost round of his ambition, can expect to win no crown, except it be, peradventure, the crown of martyrdom. But still when convinced by mournful and daily experience, witnessed at the bedside of the sick and dying, should I come before you, on the present occasion, and refrain from telling you the truth, because, pardon me the expression, pride and prejudice have sanctioned and perpetuated a practice, I solemnly believe at war with the highest physical welfare of your sex? Acquit me then of a desire to advise and admonish you without a cause. Call it not trifling or ill-manners, that I have endeavored to convince you to abandon a habit, the continuance of which, sooner or later, will end in the utter prostration of your health and happiness, and I am willing to submit to your verdict of condemnation or acquittal as you shall find it in your hearts to pronounce.

From the principles rehearsed in the former part of this lecture, you will readily understand why cold and wet feet are the cause of so much internal disorder; and I might here turn again to that portion of the audience I have just addressed, and read them another homily upon the inadequate protection they afford their feet, especially in the inclement seasons of the year. Fearing however, I shall tire their patience, I will only say that many serious and aggravated diseases are directly traceable to exposure of the feet to wet and cold.

The use of flannel is easily explicable on the principles we have been discussing. Being a bad conductor of caloric, it operates as a check upon the dissipation of the animal heat, and preserving the body at a nearly uniform temperature, thus defends it from the well known injurious effects of sudden changes of the weather. The texture of flannel, (and in these remarks woollen flannel alone is meant, and none other should be worn,) being

rough, uneven and elastic, when worn loosely on the body, beneficially promotes that condition of the skin which is most favorable to the healthy performance of its various functions.

When flannel is not worn through the summer, the time for its resumption in autumn is that period, no matter whether it be early or late, when the weather is getting to be variable. We require much more protection from the sudden transitions of temperature, which prevail in spring and autumn, than from the uniform and exalted heat of summer, or the severe and lasting cold of winter. The human body may become habituated to almost any climate where uniformity of temperature and moisture prevails. It is the sudden and unexpected variation of these conditions, from exposure to which it should be most sedulously guarded.

Those persons whose general health is feeble, and the functions of whose skins are not well sustained, in particular, should wear flannel through the whole year. Those persons also who are the subjects of short and slight attacks of rheumatism, will find immunity from its tormenting pains by the constant use of it.

We have already seen that the grosser and concentrated portion of the insensible perspiration is often confined upon the surface of the skin, and when suffered to remain there, for a while, we know it produces both local and constitutional disorder. These facts furnish a sufficient reason why we should not neglect the frequent use of bathing and ablution; and also why they should so frequently be resorted to in tropical climates, and, in some countries of the east, have become established as a part of religious duty. Let a person make daily use of the flesh-brush, and he will be surprised at the quantity of white, dry scurf, which will be detached from the skin. An occasional use of the warm bath will remove a much greater amount of impurities, than one would beforehand expect. From these considerations it is obvious, that the importance of frequent bathing or general ablution is quite too much overlooked; and that, were we practically convinced of its usefulness, we should find ample remuneration for the labor and expense of its enjoyment, in the better and firmer health it would confer. That many persons neglect the bath and enjoy good health, is no argument against the practice of bathing; for the fact that they do so, by no means proves that others would not be benefitted, or even that they themselves would not acquire an extended immunity from the attacks of disease by a steady and persevering use of it.

For persons in health the bath should be cold, tepid or warm,

according to the general tone and vigor or idiosyncrasy of constitution, and the season of the year. If a vigorous reaction takes place soon after its employment, and we directly feel a pleasant glow of warmth upon the skin, the cold bath may be indulged in. If reaction is tardily established, the cold should be abandoned and the tepid or warm bath substituted in its stead. Invalids and valetudinarians should have recourse to the bath only under the direction of their medical advisers.

Seeing then of what importance to the healthy performance of the functions of the skin, the practice of frequent, if not daily, bathing or general ablution is, it becomes matter of special wonder why they are so generally neglected. The press and the lecture-room have, for years, been teeming with argument and declamation against the prevailing errors in the science, as it has almost become, of dietetics. The whole material, both of the animal and vegetable kingdoms, has been subjected to the severest scrutiny, and lengthened and repeated experiments have been instituted to test the truth of preconceived theory, and deduce rules for future practice. Even a new word has been added to the vocabulary of the English language, in consequence of all this ; and Grahamism has become but a syncopated term to designate a diet, supposed to be the best calculated to support and prolong the life of man. But amid all this, who has raised his voice in favor of the important and neglected practice of bathing ? How little has the press, that omnipotent engine of public opinion, done for the promotion of the establishment of so rational a custom ? No man should build himself a house without appropriating a portion of it to the special purpose of a bathing room, and should furnish it with all the means and appliances by which the operation of bathing could be readily and properly performed. All colleges and academies should also be furnished with suitable conveniences for bathing, and their students should be required, as a part of their duty, to make regular and frequent use of them ; under the direction however, if need be, of some skilful physician. Bathing ought rather to be considered a necessary, than a luxury of life. We all fall to scrubbing, washing and bathing our children and friends, when they are sick, with the hope, and the rational one too, that it will assist in their restoration to health. With the aid of calomel or lobelia, according as we happen to fancy at the time, the patient recovers, but, with his returning health, we neglect the ablutions and the bath, and suppose them to be of no further advantage.

But I am admonished, by the passage of time, that this lecture should be brought to a close ; a few general observations, therefore, will bring us to its conclusion.

Hitherto, man has been studied as a moral and intellectual being only. Theory upon theory has been framed for the preservation and culture of the mind and the affections, while the physical powers have been abandoned to neglect, or investigated solely with reference to their connection with the science of medicine. Men have talked about the head and the heart as if they were little else than metaphysical abstractions ;—as if they were aliens and strangers to the physical organization to which, during the present state of being, at least, they are inseparably united. Moral and intellectual philosophy has, hitherto, only dealt with man as a spiritual entity. It has, seemingly, almost entirely disregarded even the very existence of his physical powers ;—to all appearance, verily forgetting that, by any possibility, there could exist any thing like reciprocal relationship between that emanation of the Deity which made man a living soul, and the earthly body which it inhabits and the actions of which it controls.

Because, apart from revelation, we are unable to explain wholly, the essential nature of the mind ; because we cannot entirely comprehend that mysterious union of it with matter, exhibited in our existence, are we hence to conclude that the varied phenomena, so clearly understood as consequences of that union, are to be regarded as not worthy of our consideration and study ? Because, on this particular point, we are still enveloped in darkness and doubt ; because the obscurity which still surrounds the psychological speculations of preceding ages, has not been dispelled by the labors of the present, are we hence to conclude that nothing remains to be done ? Not so, I trust. The time is fast approaching, I rejoice to believe, when man will be studied as a whole ; when the immaterial spirit and the material body will be examined together ; when the soul and its perishable dwelling-place upon earth, will be considered with reference to all the relations, sympathies and reciprocities which are acknowledged to exist between them. Then, and not till then, will the science of anthropology, in its unrestricted sense, have been fully developed. Then, and not till then, can we expect that our systems of education will be based upon those considerations which alone can insure the fulfilment of their proper and legitimate ends ; and not till then will be realized, in all its length and breadth, the great practical importance of the simple truth,

"Mens sana in corpore sano."

LECTURE II.

ON

MIND AND ITS DEVELOPMENTS.

BY REV. E. DAVIS.

1870

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ASTOR LENOX TILDEN FOUNDATION

MIND AND ITS DEVELOPMENTS.

We have assembled for an interchange of thoughts upon the general subject of education. Those of you who are teachers, have probably anticipated this Anniversary of the Institute with no small degree of interest. It is earnestly hoped, that the present meeting may exert a beneficial influence upon the cause of education in this section of the Commonwealth, and that our friends who have come from a distance to participate in the duties and privileges of the occasion, may have the satisfaction of knowing that their efforts have given a new impulse to the cause in which we feel a common interest.

Those who teach, "not only employ their intellectual faculties as the instrument, but operate on mind as a subject." The material to be fashioned and polished, and the tools used in the operation, are substantially the same in their nature. It is considered absolutely necessary that every mechanic and artisan should be acquainted, not only with the use of tools, but with the nature of the materials they manufacture; and is it not, if possible, more necessary, that those who are employed in cultivating the minds of others, should have as perfect a knowledge of its faculties and powers as can be obtained.

It is universally admitted, that those who teach must understand the branches of learning in which they propose to instruct; and since the object of teaching is not solely to impart information, but to cultivate the mind and to prepare it to acquire knowledge without the assistance of teachers, it follows, that those who would teach successfully must know something respecting the human mind, and the best method of developing its various faculties. I know not why the individual who offers to engage in

the difficult and responsible work of unfolding and educating the minds of children, ought not to be examined in the outlines and principles of Intellectual Philosophy.

Permit me to solicit your attention to some remarks respecting *the mind, and the method of developing its powers.*

1. *The Existence of Mind.* Mind is imperceptible to our senses, and yet the evidence of its existence is as satisfactory and conclusive, as is the evidence of the existence of magnetism, or atmospheric air. If a piece of steel be magnetized, its appearance remains unchanged, but when brought near iron filings it attracts them to itself, and we are persuaded that there is in the steel an invisible agent that does not exist in other bodies. We look out upon the forest and see the trees tossing to and fro; we look upon the lake or ocean whose surface yesterday was smooth and glassy, and see the majestic billows roll, having their tops crested with fury, and though no cause of this commotion is perceptible, yet we discover abundant proof of the existence and power of atmospheric air. In like manner, we cast our eyes upon a mass of matter in the form of a human being. It moves, it talks, it reasons, it plans and executes. We are sure that the material body is animated by an agent that is distinct from the body itself. We infer from the effects that are distinctly seen, that something which we call mind inhabits that body. Tomorrow the same moving mass lies motionless; the eye no longer beams with intelligence; the tongue is mute; the lips are sealed in silence; the lungs have ceased to move and the pulse to beat. The invisible and intelligent agent that was there has departed. By such observations, we are led to the conclusion that there is in us a mind, an immaterial agent that thinks, wills, reasons, and which forms the sum and substance of what we call ourselves.

2. *The relation of the Mind to the Body.* The body is simply the house in which the mind has a temporary residence. We know not the precise manner in which they are united; neither the ablest metaphysician, nor the most skilful physiologist, can lay his fingers upon the silver cord that fastens together the mortal and the immortal part of man. We know something, however, relative to its condition while in the body. The brain, together with what is called the nervous system, forms the organ through which the mind manifests itself and looks out upon the material world. The five organs of sense may be called the windows of the mind's house, through which it gazes at external things.

It is proved by observation and experience, that the accuracy and the amount of the knowledge we acquire, depend very much upon the healthiness of the nervous system. Hence arises the necessity of what is called Physical Education, i. e., of doing something by exercise, diet, and regular habits, to promote and preserve the health and strength of the body. If an individual's health is impaired so as to render him *nervous*, it produces a disastrous effect not only upon his ability, but upon his inclination to put forth much mental effort. The opinions formed by a mind in such a state, are often as far from the truth, as are the opinions a person forms respecting objects seen through colored glass or lenses. If you were confined within a room the windows of which were composed of panes of glass of various colors, and of lenses of different degrees of convexity or concavity, we should put no confidence in your testimony respecting the color or size of external objects. You would see every thing colored, magnified, diminished, or in some way distorted. In like manner, if the nervous system is disordered, it colors or darkens the windows through which the soul looks, and proves the occasion of its receiving erroneous ideas. We cannot attach too great importance to bodily health ; it is essential to the greatest degree of mental vigor.

3. *Hypotheses respecting mental operations.* There are some who say the mind is an assemblage of distinct faculties and emotions, analogous somewhat to the corporeal organs. As seeing, hearing, and feeling, are performed by distinct bodily organs, so it is believed by some that the operations of memory, abstraction, and imagination, are performed by separate and distinct parts of the same mind. There are others who maintain that the mind is one ; and that the different mental operations are so many different states of this one mind. They teach us that the whole mind is employed in every act of memory, in every act of reason, and in every act of imagination. There are others who lay aside every hypothesis on this subject, and simply inquire, what are the various exercises of the mind ? This is the wisest course. It is not so important that we know in what part of the body the soul has its seat, and whether the whole or a part of it be exercised in every mental act ; as it is to know precisely what the mind does, and how it can be assisted to perform its functions in a more perfect manner.

It is certain that every mind remembers, reasons, conceives, imagines, fears, and loves ; it performs these and other operations. It is also certain that by exercise the mind acquires a fa-

cility in performing these operations, and that all its powers are capable of a high degree of improvement. No limit has yet been discovered, beyond which the faculties of the mind cannot be improved. Of course no limit can be assigned to our progress in knowledge. It is said of Themistocles, that he could call all the inhabitants of Athens by name, when they amounted to 20,000 in number. "There is on record an account of a man who could repeat the whole of the contents of a newspaper after having read it through once." Sailors, who are accustomed to judge of distances by the eye, acquire an astonishing degree of accuracy. Persons, too, who are in the habit of solving questions in arithmetic mentally, acquire not only a great facility, but an ability to solve very difficult problems. If, however, the mind omit for a time the performance of any of its accustomed operations, it gradually loses its power and becomes weak. We have an illustration of this in the case of Zerah Colburn, who was formerly regarded as a prodigy, on account of the facility with which he solved intricate arithmetical questions. By neglecting the gift that was in him, he became weak as other men. We learn from such facts, that a continued, constant, persevering application of the mind to a subject, is more important than any original greatness of mind. This inference is corroborated by what has, no doubt, been observed by every teacher, that children learn more rapidly after they have been in school a few days than at first. Every faculty of the mind is rendered more vigorous by exercise, and loses strength by a relaxation of effort.

4. *Origin of Knowledge.* There has been much controversy in former times in regard to the origin of our knowledge. Some have maintained that we have innate or *inborn* ideas implanted by our Creator, while others have asserted that all our knowledge is derived through the medium of the five external senses. It is readily admitted that we have no evidence of the existence of ideas in the mind previous to their being received through the senses. The first ideas of children are about sensible objects. But it cannot be conceded that all the knowledge, even of children, is derived from this single source. The presentation of an object to an organ of sense, is the occasion on which we suppose the mind first begins to act; but the ideas thus received form data from which the mind, by a process of reasoning, deduces a new class of ideas. It must also be remembered that the greater part of our knowledge respects things immaterial, and of course imperceptible. Such are all our opinions on civil, literary, scientific, moral, and religious subjects. That theory, therefore,

which ascribes the origin of our knowledge to sensation and reflection, approaches nearer to the truth than that which ascribes it to sensation alone. This latter theory has in its turn given place to another more conformable to fact; which ascribes the beginnings of our knowledge to sensation, reflection, and *testimony*. When we consider how much of our information comes from others, and for the truth of which we depend on their veracity, it is a wonder that the ancient disputants did not perceive testimony to be a source of knowledge.

5. *Difference in Minds.* The question is often asked, Are all minds originally alike? It is certain that every person has the same appetites, passions, and intellectual powers. There is as much uniformity in the number and kind of operations that each mind is capable of performing, as there is in the number of bones and muscles in the body, and in the variety of their motions. Though all minds have the same faculties, yet we never find two precisely alike. In different persons, different passions or appetites gain the ascendancy, and give a peculiar complexion to the whole mind. The character of an individual mind may be affected by its occupation, by the scenery with which it is conversant, by climate, by associates, and by a variety of circumstances. Hence, if all minds were originally alike, they would begin to be dissimilar in their first developments. But, you will ask, whether circumstances occasion all the difference, or whether there is a difference previous to any influence *ab extra*? This question throws us back to the character of the mind previous to its outward manifestation. What it was before we have evidence of its existence we cannot tell. The intellectual, as well as the moral tree, is known by its fruits. There is one fact, however, that renders it very probable that all minds are not precisely alike in original strength and capacity. Children belonging to the same family, having the same teachers, and in almost every respect influenced by the same circumstances, differ as widely in intellect as those residing in different quarters of the globe. I have thought that the same thing is analogically proved by the fact that no two bodies are exactly alike. Though all bodies have the same general form, and are composed of the same members, yet there are differences so great, that one is easily distinguished from another. Who knows but these differences are occasioned by, or adapted to some original difference in the minds that inhabit them.

There is another consideration which leads to the same conclusion. In the midst of great uniformity in the works of God,

we discover at the same time great diversity. The apples, and the pears, and the peaches, that grow on the same tree, differ in size and fairness. Trees and animals of the same species preserve a very near resemblance, and yet differ much from each other. If we are allowed to reason from analogy on this subject, shall we not conclude that the same diversity exists in the intellectual, that is seen in the material world.

It seems furthermore that the Creator intended that there should be minds adapted to different pursuits, and fitted for different services; hence He hath set in the church "first apostles, secondarily prophets, thirdly teachers, after that miracles, then gifts of healing, helps, governments, diversities of tongues." In every age he has raised up men who appear upon the stage of life, as if qualified to act a particular and an important part. Such were Aristotle and Alexander, such were Bacon and Newton, and such were Franklin and Washington.

The original difference of minds must be considered however comparatively small. Education increases the difference, and minds that were originally nearly upon the same level, may forever diverge from each other. In crossing the fields covered with bush and brake, the birds that start up along the track pursue very different courses; the wren flies low and lights upon the nearest bush; the lark rises high, darts off, and drops in the grass at a distance, and the pheasant whirls away on rapid wing, and hides in the depths of the forest. So when you enter a school room, the children that stand apparently upon the same level, conning the same lessons, when fledged for flight will diverge from each other forever. Some will fly low, as if tied to the earth's surface; others will move in waving lines, as if more intent on pleasure than profit; others will go straight forward, as if intent on outstripping their fellows, and others will soar upward, as if to escape the din and bustle, the smoke and fogs of earth.

6. *The Mind may be Injured.* The development of the intellectual powers may be greatly retarded or partially prevented, and then there will be the mind of childish strength and capacity in the body of an adult.*

While I readily admit that there is an original difference in minds; I still believe that many, whose minds on arriving at manhood are feeble and rude, if they had been properly trained might have shone in the literary horizon, as stars of an honorable, if not of the first magnitude.

* Xenophon's *Cyropædia*.

The mind may be prevented from being what it otherwise would be for the want of sufficient and proper exercise. We learn from experience and observation, that the mind must be strengthened, and its powers developed by appropriate exercise. If a member of the body be kept motionless, it will become comparatively weak. If a strong man be confined for months to a bed or chair, he will be less able to endure fatigue or hardship; or if any individual have no regular occupation, if he depend for exercise on the fitful labor extorted from opposing indolence, he may become sickly. Exercise is as necessary to give vigor to the mind as to the body. The reason, why some are dull of comprehension, is because they have not been accustomed to comprehend much. Memory is void of the power of retention, reason is blind, and the wings of imagination are inactive, because they have not been sufficiently exercised.

The mind of a person is injured by removing the necessity of his thinking for himself. He who is engaged in a regular and useful employment, though he have but little acquaintance with books, will be a person of good common sense. The very act of contriving ways and means to support a family, and of calculating from day to day the probable success of a plan, exercises the mind, develops some of its faculties, and makes the individual more noble than he otherwise would have been.

We see from this, why a state of servitude is injurious to the mind. Those employed in servile labor do not lay out their own work, and if they receive only food and clothing, they have no inducement to form plans and combine means to produce an end. Others think for them; and since

"To follow foolish precedents and wink
With both our eyes, is easier than to think,"

it follows that those who are not under the necessity of putting forth some mental exertion, will exhibit more intellectual imbecility than those whose time and services are all their own. The domestic, who toils for wages, moves usually in a beaten track, and unless he has a taste and opportunity for reading, will in process of time be more likely to sink than to rise higher.

So far as civil governments discourage the industry and enterprise of the people, they retard civilization and mental improvement. If men have no encouragement to labor; no prospect of contriving any way to promote their interest and happiness, they will remain in a state of corporeal and intellectual sloth. On the same principle, all pagan systems of religion, by obliging their

adherents to believe a certain set of dogmas without asking why or wherefore, without thinking on the subject for themselves, greatly retard intellectual and moral improvement.

I have alluded already to the importance of physical education ; in this connection permit me to allude to it again. A neglect of it injures the mind, because it reaches the organs with which the mind works. A person who is strong and vigorous, will make but little progress in felling trees if his axe is dull. You may blame the man, but the fault is in the axe ; he has been diligent and has expended strength enough to have accomplished more work. Here is a youth who is nervous, and irritable, and weak in body ; you put him upon the study of languages or mathematics, he accomplishes but little, and you charge him with indolence. The youth is not to blame ; he has probably done all he could under existing circumstances ; his axe is dull. The instrument which the mind uses is feeble ; if the intellect of Bacon or Boyle was connected with such a body, it would seem to be shorn of half its strength.

7. *Obstacles that retard the Teacher in his work.* One obstacle which the teacher has to encounter is, a prevalent opinion that no one will make a scholar unless he is a scholar by birth. The sentiment of the Roman poet, that poets are poets born, is extensively believed. Hence such men as Linnæus, Franklin, and Laplace, and such women as More, Adams, and Edgeworth, are regarded by many as almost superhuman beings ; and that it is not permitted to the common race of mortals, let their efforts be what they may, to have their names registered equally high on the scroll of fame. But why not ? Was Dr. Barrow a scholar by birth ? When young, his biographer says, he was famous only for quarrelling. His father had so little expectation of his ever becoming a scholar, that he frequently said if any of his children were to die he hoped it would be Isaac. And yet this same Isaac Barrow, was appointed Master of Trinity College. When the king confirmed the appointment, he said he had given the office to the best scholar in England.

Adam Clarke, author of a Commentary upon the Scriptures, and a man of various and extensive learning, when young, was famous for nothing but rolling large stones. It was not until he was eight years old, that he was able to put letters together so as to form words. The truth is, every individual is born without knowledge, but with mental faculties, by which if they are properly exercised, it can be acquired. No one can learn with-

out labor, but with it every one can, though some will advance with greater rapidity than others.

Another obstacle which the teacher has to encounter, is the want of patience in the learner. Some scholars are very easily discouraged; the smallest hindrance looks like an impassable mountain. Some would learn, if they could forego sensual pleasures, and turn their thoughts from objects external and material to those that are internal and intellectual. If they could be drawn up the hill of science, they would ascend, or if the mines of truth could be laid open by physical power, they would like to explore them, but they have not patience enough to endure a long continued application of the mind. If they cannot in a few days become skilled in all the wisdom of Egypt, they sink in despair. The road to learning is not a royal road, it appears rough, and those who believe they have no wings to fly, settle down in the low vales of ignorance, and die upon the shore of a sluggish stream.

Another obstacle that retards the success of teachers, is the impression many youth early acquire that they are poor scholars. They suppose that they cannot acquire much knowledge because they cannot learn as rapidly as some others, or because their memory is not so retentive and ready. It would be well to remind every child of the motto of Sir William Jones, "What others have done, I can do." The effect will often be salutary. It does not follow that I have no muscular strength, and that I am unable to labor, because I cannot, Sampson-like, carry upon my shoulder the gates of a city; neither does it follow that I have no mental strength, and cannot perform much intellectual labor, because I have not a mind that grasps great subjects almost intuitively.

Another obstacle, is the prevalent opinion, that it is of no use to study any branch of literature or science that cannot be turned to some pecuniary benefit. The young lad, who is destined to spend his days in the counting-room, sees no use in studying any thing except geography, arithmetic, and book-keeping. Even school teachers too easily believe that labor bestowed on any branch of knowledge they do not expect to teach, will be lost. They study too much for filthy lucre's sake, having no just sense of the importance of mental cultivation. I trust the day is near, when the question will no longer be, What studies are most lucrative, but what will best develop the faculties of my mind, and fit me for the greatest sphere of usefulness.

8. *The Development of the Mind.* The appetites and passions are developed earlier than the intellectual powers. The

former seem to be the spontaneous growth of the mind, but the latter require the aid of diligent cultivation. It is proved by the present condition of two-thirds of the human family, that the mind, left to itself, will be neither moral nor intelligent. In the infant, the first feeling that manifests itself is a desire for food ; at a later period, the passive emotions, such as fear, love, and anger show themselves ; after these the active emotions, such as the desire for knowledge, power, and wealth spring up. As age ripens in manhood, it will not be necessary to strengthen the appetites or its passive emotions ; they will rather need to be curbed and restrained, and brought under the dominion of the intellectual powers, which are developed last ; and generally in a very slow and imperfect manner, without the aid of skilful teachers.

The great object of education is to develop the intellectual faculties and to establish their dominion over the passions. The latter belongs to the moral and religious part of education ; my remarks will be limited to the former.

There are two kinds of memory, the local and the philosophical. A local memory associates things with the place in which they are, or with things to which they are contiguous. Thus the home of your childhood, or the school-house, or the name of a river, suggests each a train of thought to the mind. This is too often the only kind of memory that is cultivated, it is that which requires no labor on the part of the teacher to produce. The child learns an answer to a given question, and his mind locates it on a certain part of the page ; if he forget the locality he forgets the whole. The teacher must direct his attention to the cultivation of a philosophical memory ; special pains should be taken to develop this variety of memory. It consists in forming in children a habit of associating things according to the relation of cause and effect, of antecedent and consequent ; it consists in teaching a scholar elementary principles, from which he can infer the cause to a given question, rather than in requiring him to commit to memory a written answer ; it consists in training a child to mention the effects of a certain cause, or the cause of certain effects. This is the kind of memory that is most important and yet most neglected. It is developed not by a direct effort to improve the memory, but by the more general effort to exercise and improve the reason and judgment. He who is taught to reason correctly and soundly, will have the powers of his mind well developed, but he whose reasoning is muddy and inconclusive, has a mind poorly developed.

Reasoning consists in comparing two or more facts or events with each other, and drawing from thence an inference. The way to bring out and to improve the reasoning power, is to oblige the child to exercise it. Instead of correcting his errors by telling him what is true, show him how to come at the truth by a process of ratiocination. If a scholar give a wrong answer, it is of no use to tell the true answer and pass along. Let the teacher propose other questions, by answering which, the scholar will discover his own error, and correct himself. If this can be done, the scholar's mind will be benefited, and he will be pleased to know that he has some strength of his own. Suppose you have a class in English grammar. The sentence to be parsed is this, "The grizzly bear inhabits the northern part of America." A scholar, who has noticed that adverbs generally end in *ly*, rashly concludes that every word ending thus is an adverb, and therefore says *grizzly* is an adverb. You perceive that the child reasons, but he reasons wrong, and now the teacher has three things to do, (1.) to convince him of his error, (2.) to lead him to reason right, and (3.) to show him how he erred. I will not tell him that *grizzly* is not an adverb, but proceeding on the supposition that it is, I ask what it modifies, or what is it that is *grizzly*? The scholar says, "it modifies bear." And what part of speech is bear? "A noun sir, because it is the name of an animal." Well, what are those words called that modify nouns? "Adjectives." Then what is *grizzly*, a *grizzly* bear? "An adjective." The scholar had data enough to have given the correct answer at first, but he did not know how to use his knowledge? By being guided through the right train of reasoning, he has detected his error, and now it is necessary to show him that he reasoned wrong when he came to the conclusion that the word was an adverb because it ended in *ly*. By conducting a recitation in this manner, the reasoning faculty is constantly exercised, and of course improved, and a philosophical memory cultivated.

Whatever be the subject of the lesson in which the pupil fails, it is as important to know why he gives a wrong answer, as it is to know that it is wrong; it is as important to learn all the by-paths in which a student goes astray, as it is to point out the right path. Sometimes a scholar gives wrong answers, because he attaches a wrong meaning to a word, and sometimes because he does not understand a principle on which the subject of the lesson is based, or because he does not know how to apply a general principle to a particular case. The mind of the teacher, who is in a peculiar sense the presiding genius of the school-room, must

ever be on the alert, it must take a wide range and be master of the subject of the recitation, or he will not detect errors, and apply remedies, guide into truth, and give the proper exercise to all the faculties of the mind.

The great art of teaching so as to develop the mental powers most perfectly, consists in keeping the child's mind active; in exciting to constant effort, not an effort to remember something that is forgotten, but an effort to reason correctly, to shun error, and to elicit truth.

I beg leave here to offer a few remarks upon the culture of imagination with which I shall conclude. I do not think that sufficient importance is attached to this faculty of the mind. Many seem to regard it as a dangerous faculty, one which ought to be stifled and destroyed, rather than regulated and strengthened; they would load its wings with lead, rather than trim them for loftier flights. These views arise from a mistaken opinion respecting the province of imagination. They suppose its sole use is to conjure up scenes of fiction and to build castles in the air. If this were the only province of imagination, it would be a useless faculty, and the less time devoted to its cultivation the better. Dugald Stewart speaking of the advantages derived from this operation of the mind, says, "The imagination is the great spring of human activity, and the principal source of human improvement. As it delights in presenting to the mind scenes and characters more perfect than those we are acquainted with, it prevents us from ever being completely satisfied with our present condition, or with our past attainments, and engages us continually in the pursuit of some untried enjoyment, or of some ideal excellence. Hence the ardor of the selfish to better their fortunes, and to add to their personal accomplishments; and hence the zeal of the patriot and of the philosopher, to advance the virtue and the happiness of the human race. Destroy this faculty, and the condition of man will become as stationary as that of the brutes."

There are some persons who are distinguished for originality of thought, for beauty of illustration, and the suggestive character of their style; there are others who make frequent discoveries in the arts or sciences; and others who are full of invention; such persons excel in the particulars mentioned, on account of having a well cultivated imagination. "The lower animals so far as we can judge, are entirely occupied with the objects of their present perception, and the case is nearly the same with the inferior orders of our own species. One of the principal ef-

fects which a good education produces upon the mind, is to accustom it to withdraw attention from the objects of sense, and to direct it at pleasure to those intellectual combinations that delight the imagination."

Sensibility depends chiefly on this faculty ; by it we are prepared to weep with those that weep, and to rejoice with those that rejoice. Much of the *apparent* coldness and selfishness of mankind, proceeds from a dull imagination. I do not mean that the whole of it has this origin, but we know that our sympathies for those in distress are awakened by the vivid conception we have of their sufferings ; unless, therefore, we have imagination enough to portray in our own minds an absent and remote scene of distress, our sympathies will not be excited. Doubtless there are many who have hearts to feel, but continue unmoved in consequence of the dulness of their imagination.

Poetry and romance is not the only province of this faculty ; it is employed in the study of the severer sciences,—it aids the mathematician in his search for the solution of a problem ; it assists the philosopher to form hypotheses to be used as a framework on which he arranges the facts he discovers ; and is an indispensable help of the mechanic who contrives labor saving machines, and fills the patent office with new inventions.

The importance of developing and regulating this faculty, you will all admit, but how can it be done ? It will be useful to require pupils to describe persons, places or things ; let them write descriptions of places they have never seen, or descriptions of events that have never transpired, and let the propriety, the completeness, and the harmony of the parts of the sketch, be the principal subjects of criticism.

A teacher has a fine opportunity for cultivating this faculty in the study of geography. In looking at maps there is danger that the views of a child will be contracted. In a burlesque upon modern times, a female is represented as saying, that as she looked upon the map of the United States, it seemed to her that "she could quilt a piece big enough to cover Connecticut in two afternoons." The child who looks upon a map of the United States twelve inches square, or upon a globe eight inches in diameter, very easily imbibes the idea that his own town forms the most important part of the world. I do not like the course pursued by those teachers who whittle down great ideas, so as to get them into the child's mind, while it remains of nut-shell capacity. Let the idea retain its own size and grandeur, and then expand the mind until it will embrace the subject. Rather than have my

arms and shoulders pared and compressed to the dimensions of a little coat, I would have the coat stretched to the size of the limbs. Suppose I wish to give a child some idea of London, instead of telling him about "the little Thames and its pretty little iron bridge, and a little hole under it called the Tunnel, and the great bunch of houses along the stream," I would draw an outline of the city upon the blackboard, tell him its circumference, how far it extends along the river, how long it would take him to walk from Westminster Abbey to the Tunnel, and how far it is from the river to the northern extremity of the city. I would tell him how many churches and how many houses there are in the city; and that there are as many people as there are in Massachusetts, Rhode Island and Connecticut. By mentioning particulars, the child's mind expands to the greatness of the subject.

Instead of asking a child whether he could reach the sun with a fishing rod, or whether he thinks it to be as far off as Mr. Smith's barn, I would tell him that though it may seem near, it is in fact 95,000,000 miles distant, that if there was a rail-road from the earth to the sun, on which the cars should run 20 miles in an hour during 300 whole days in a year, it would be 650 years before they would arrive there. By such means the mind of a child may be expanded, and approximate, though slowly, to the magnitude of the subject.

I have protracted my remarks much farther than I intended, when I commenced. My only apology for presuming to lay so heavy a tax upon your patience, is the copiousness of the subject and the difficulty of determining when and where to stop.

LECTURE III.

ON THE

MEANS

OF

CULTIVATING A CLASSIC TASTE

IN

OUR COMMON SCHOOLS.

By LUTHER B. LINCOLN.

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CULTIVATING A CLASSIC TASTE.

WE meet, Ladies and Gentlemen, not for unnecessary criticism, but for mutual aid and sympathy, on the great subject of American Education. In this spirit, and in compliance with the request of the Directors of the Institute, I offer a few remarks on the question: "By what means can a classical taste be cultivated in our common schools?"

In the performance of this duty, although the gentlemen assigned no particular sense, in which the term, classical, should be used, yet, I trust it will not be a violation of the spirit of their request, to consider it as synonymous with pure, correct, or refined. Indeed, this is the only sense, in which I could, conscientiously, examine the subject, or in which it can, at present, apply to the common schools of our country. In the more ancient or technical sense of the word, it has nothing, and, I trust, will have nothing to do, with the common school discipline. This is said, with no feelings of hostility to the departed shades or languages of olden days. I should be unwilling to present myself, in so barbarous an aspect to this assembly. Neither, on the other hand, would I attempt to prove, what few intelligent minds deny, that to meditate on ancient virtue ennobles the heart, or to translate the symbols of ancient genius into our mother tongue enriches the style. The wish is breathed in the conviction, that the study of the ancient classics could not be introduced, at present, into our common schools, consistently with their highest prosperity, or the real advancement of classical knowledge in the community. Such an arrangement would not harmonize, I think, with the fundamental principle on which those schools were established, and on which they have been supported, from the earliest days

of our republic—that of affording to our youth, during the short period allowed them for scholastic discipline, the best means of acquiring a good English education, preparatory to the discharge of their private and social duties as men, and the maintenance of our country's honor, virtue, and stability, as American citizens.

Cadwallader Colden observes, in a letter relative to the establishment of a college in Pennsylvania, written to Dr. Franklin, in 1749, as reported in Sparks' Correspondence, "While you keep the great end of education in view, that is to enable men and incline them to be more useful to mankind in general, and their own country in particular, you cannot be in danger of taking wrong steps, while all of them tend to that end."

"I would not oblige all the students to learn Latin and Greek. I would be so far from making a knowledge of those languages, or of any foreign language, a condition of the scholar's being admitted into the college, that I would have all the sciences taught in English. It would be of greater service to the generality of scholars, to have the most eminent English authors, both in prose and verse, explained to them, by showing the beauties and energies of our own language, than to have the learned languages taught to them, who afterwards in the course of their lives, may never have occasion to make use of them. Nevertheless, they who are designed for the learned professions of Divinity, Law, and Physic, ought to understand the learned languages; and merchants and others, who may have business with other nations, ought to understand the French at least; but in all cases our own language ought to be our principal care."

This passage is not offered, as strictly applicable to our own days, but, as containing fundamental truth, on the subject of American education. I cannot conceive that any observing mind should be insensible to the golden treasure of the ancient languages; neither do I believe that any prejudices can detract from the real merit of those noble tongues, whose glory once was, still is, and will continue to be, till the languages of earth are forgotten. But it would be unjust, I think, to consider them as the "pearl of great price," for which the English student can afford to sell all that he has, or much that he might otherwise acquire, and that, too, many times, not for the true possession of the article, but for an obscure vision of that brilliancy, which they, who have in spirit and truth examined it, and not his own eyes, declare that it possesses.

With this qualification of the term classical, a wide field of observation is still presented; "since taste," says Dr. Blair, "is

the power of receiving pleasure or pain, from the beauties or deformities of nature or art." It may, possibly, have been in a more restricted and literary sense, that the word was suggested in the assignment of the subject, and yet, in the most unlimited acceptation of the term, much, by industry and fidelity, may be effected. It would not be true, I think, to say, that the subject may be pursued under the most happy auspices. The circumstances of our people, combined with the spirit of the age enlisted under the popular banner of "utility," would not seem to warrant the assertion. So long as the elegant garden must be made desolate, for the accommodation of brick walls, or the graceful tree robbed of its branches, because, perchance, a shingle sooner decays on the shaded roof, we cannot expect that the interior of the common school-house shall present many objects calculated to inspire the youthful bosom with the love of fair proportion, or to cultivate a taste for the beautiful in art. The period may arrive, when a better opportunity shall be afforded our youth, for imbibing that taste for the fine arts, which some other nations have valued so highly, for the gratification of which they have made so ample provision, and whose influence they have considered so happy on the national character. We would fondly hope, that the time may come, when it shall be no longer necessary to say to the American youth, nay, to the educated American gentleman, "let not your pencil, nor penknife, nor finger, soil the purity of that marble, nor rob that statuary of its smoothness, nor deface that canvass. Examine, but abuse not the work of genius."

In speaking thus, we would not forget to bear testimony to the generous talent and zealous application, which have been devoted to the cultivation of the fine arts, in our land. It may be true, that the words American architecture, are not sounded in the ear of nations, and still farther, that we have no style of building. While in days of yore, genius and taste were concentrated in preparing a residence that should be thought worthy of their gods, and with them, of immortality, our sturdy forefathers regarded more the savor of their incense, than the altar from which it ascended, the walls which surrounded or the roof which overshadowed them.

"Bright jewels of the mine,"

their lustre shone not in the pillared marble, nor in the decorated cornice. They held no such possession. They transmitted no

such legacy to their posterity. As our fathers left us, so, in a great degree, have we remained, doing little as a people to advance our architectural inheritance. We have studied comfort rather than grace, and when riches have invited to luxury, taste has too often been buried in splendid profusion. Still, the traveller seeks not in vain for the beautiful temple of God, or the private dwelling on which the cultivated eye rests with pleasure.

In sculpture and painting more has been effected; and if no distinct school has been established, much care has been taken to adorn our country with the original and imitated productions of foreign taste. Our public and private halls proclaim the skill of American workmanship. Our cities are proud to exhibit at home the labors of native talent, while abroad American genius is executing works honorable to the land of its birth.

On these exhibitions of the fine arts we look with much interest. Their influence on the national sentiment we believe most happy. If they are of such a character as a pure and cultivated mind would approve, a genuine taste for them can have no fellowship with what is base or vulgar.

The immediate influence of such exhibitions on the mind of the scholar must necessarily depend, in a great degree, on his local situation. While the city youth is invited to a frequent repeat, the inhabitant of the country spends his childhood, his youth, nay, his early manhood, perhaps, and forms the indefinite picture only, conveyed by the word to his imagination. The former enjoys a privilege of no small value. If there be any thing to counterbalance the fact as recorded in the adage, "God made the country, while man made the town," it is the opportunity enjoyed in the latter of frequent visits to the galleries of fine arts, and those scenes, where genius and taste, refinement and benevolence, combine to gratify the tender sensibilities of our nature. It is these, and not its abundant wealth, nor magic creations of pomp and splendor, which constitute the city's enchantment. Who does not feel that the metropolis of New-England, in her late efforts to collect the Alston paintings from distant parts of the Union, as a tribute to her honored son, was adding to her character what no mere decoration of wealth could confer? or that the city of Brotherly-Love, in the canvass of her West, sheds a glory even on her institution of mercy?

To such exhibitions of the fine arts let our youth be introduced as often as circumstances permit. Let them be attended, if possible, by their teacher, or some intimate friend of refinement and intelligence. Let their minds be directed to objects, which from

their character or execution are calculated to improve the taste, or enrich the heart; while a kind and familiar intercourse shall draw forth their own sentiments for correction or sympathetic approval. Such a scene, I believe, will not be in vain. It must leave its impress on the heart. It will do something in creating a taste for physical, intellectual, or moral beauty.

I know that the imitative arts may be sold to corruption. But this affects not the legitimate influence of the scene described. Where the sentiment of the community is, as will ever be the motto of a delicate, nay, of a decent mind,

*"Immodest sights admit of no defence,
For want of modesty is want of sense,"*

there is little danger that the effect will be otherwise than happy. From the moment that the Matchless Artist in Eden depicted on the hearts of His pure worshippers, the inimitable hues of beauty and truth, to the present, this Divine Art has exerted a kind influence on the human soul, awakening its moral sensibilities, as well as refining it to the harmony of color, form, and proportion.

Will you allow me to make a brief and simple analysis.

Painting may be considered under three characters—the pleasing, the instructive, and the moral. Its first and humblest sphere is to please the eye by an accurate imitation of the object it professes to describe; or to gratify the taste by a skilful delineation on canvass, of the real or imaginary scene in the mind of the artist. Such, for example, is the pleasure we derive from a finished portrait of a stranger, or person in whom we feel no particular interest, a landscape-piece, &c.

The middle character may be seen in those historical pieces, whose chief object is to communicate important facts, or in the various illustrations of the arts and sciences, or the representations of natural history, as seen in the elegant delineations of the feathered tribe attached to Wilson's or Audubon's Ornithology.

The last and highest sphere of the art is found in those sublime productions, which to the pleasure of the eye, the gratification of the taste, and the improvement of the mind, add the still higher and nobler purpose of cultivating the affections, exciting the moral sensibility, and inspiring the beholder with the admiration of truth and goodness, or with an abhorrence of the opposite qualities. Here I should look for the happiest influence on the youthful taste and character.

There is a little story, which in our boyish days was dear to all our hearts. Of its author and literary merit I am ignorant. Suffice it to recollect, that it was called "The Children in the Wood." Its prominent traits were, that a cruel uncle, who had been left the guardian of his brother's two little children, wished to rob them of their property. To accomplish his purpose, he allures them into a wood, at some distance from home, and there leaves them, with the promise of soon returning. The little brother and sister are represented as taking each other by the hand, and wandering about the wood crying for their uncle's return. But he comes not. Their feeble powers at length exhausted, they lie down under a tree, there to remain till a Father's protecting love relieves their distress, and takes their spirits to Heaven. Two robin redbreasts—one of the most touching scenes the imagination ever conceived—espy the dead bodies, and commence the tender office of covering them with leaves; as if they knew that those little bosoms were the temples of innocence. What let me now ask would be the sentiments of one of our youthful minds of ordinary feeling and capacity, after hearing or reading this story, if introduced to an elegant painting of those dead children and the robins bringing leaves to cover them? What would be the first and strongest sentiments? What a fine tree? How natural its bark and branches? How beautiful those leaves are which the robins have brought for a grave? Look upon the red on that bird's breast! O what an elegant painting! No, not one of these. The eye may see all this, and tenfold more; but the heart has something else to do. The heart is feeling for the cruelty of the murderer, or filling with gratitude to the little birds, for loving what itself could love. How often would the child be found, from eight to fifteen years of age, possessed of common intelligence and common advantages, who would not be thus affected, and whose power of appreciating a fine production in the arts might not be increased by such a scene.

Again. What would be the sentiment of one of the intelligent pupils in the most advanced class of our common schools, on viewing the painting, which hangs in the Catholic cathedral in Baltimore—a picture of exquisite workmanship, representing Joseph of Arimathea clasping the body of the Redeemer, as taken from the cross and delivered to him by the Roman soldier? Would the predominant feeling be admiration of the imitative power of the artist or his perfect conception of the scene? the aspect of the cross and surrounding objects? the noble form of

our Saviour's friend? or the shading of the arms and fingers which encircle that sacred body? or any other exhibition of skill displayed in that moving canvass? No. That youthful soul, if under happy auspices, would be absorbed by the moral greatness of the event, which brought life and immortality to light. This sentiment being sufficiently indulged, the particulars of the scene would receive attention, afford their rich gratification to the taste, and exert their influence in advancing its correctness.

To the value of such exhibitions of the fine arts, historical fact, I think, testifies. How much has the Louvre done for the public taste of that capital, which ranks as the emporium of the world? Whose females it is said display in their menial offices a refinement of dress, a captivating style of personal attire, which is sought for, in vain, in the richly dressed lady of other capitals. Or in the language of a late New-England visiter of careful observation; "The laundress of Paris puts on her dress with more taste than the gentry of other nations." How much has the Louvre done to form a sentiment, which is said to be coupled with such a respect for the fine arts, that, although the most splendid gallery of paintings in the world is thrown open to the inspection of the lowest class of subjects, and in the midst of a community distinguished for popular excitement, yet the visiter would no sooner think of leaving his mark behind him, than of wounding the fleshly covering of his own body.

To this power of communicating pleasure in their personal attire, possessed by the females of the French metropolis, I have given the honorable appellation, taste. It appeals to a refined sensibility to natural beauty, and is quite distinct from mere style or fashion. The latter varies with human caprice. The former is as immutable as the instincts of humanity. The latter is often gaudy, as well as costly. The former must be chaste, however splendid. The latter, although the mark of gentility in one community, may appear ridiculous in another. The former must be pleasing to every cultivated eye.

Allow me to illustrate. A custom has prevailed, in some places, of presenting a guest, when seated at the social board, a small vessel of water, in which he may dip the ends of his fingers, and thus perform ablution for those valuable extremities. It must be acknowledged that some taste is displayed in the preparation, since nature is said to "deck the scene," in the form of a leaf floating on the surface of the water. On a certain occasion, as we learn from the anecdote, a gentleman being offered one of those bowls of cleansing, and thinking that the

liquid was to be used, as it commonly is on a similar occasion, appropriated it to the quenching of his thirst, notwithstanding the manner in which it was presented. This may have been a violation of etiquette, but it might be difficult to show wherein violence was done to the principles of a classic taste.

Again. In the vicinity of a distinguished city, on one of the little isles of its beautiful archipelago, a few years since, a noble building was erected for the alleviation of human suffering. Care was taken that the model should be purely Grecian; and the structure was commenced accordingly. In due time its walls were completed; receiving, on either side, that classic ornament, a fine colonnade. Being situated on a "sea-girt isle," and not stinted for room, as are some of the most elegant edifices of our country, circumstances seemed to favor its completion in a style, which would reflect honor upon the projector and the city. This hope, however, was disappointed. Said a gentleman of taste, while sailing in the vicinity of the island, "I labored with all my power to preserve the classic purity of that building; but in vain." It was completed—a Grecian temple bearing a red roof interspersed with projecting windows, somewhat resembling those of an American cotton factory. This, I conceive, was a violation of taste, and would be acknowledged as such by every mind possessing a sensibility to the harmony of color, form, and proportion—or a classic taste in architecture.

Reference is here made to the same principle of our constitution, which the author of the epistles to the Corinthians recognises, in the first of those letters, xi. chapter, 14th and 15th verses. "Doth not even nature itself teach you, that if a man have long hair it is a shame unto him? But if a woman have long hair it is a glory to her; for her hair is given her for a covering."

May we not hope in the spirit of patriotism, and in the anticipation of our country's future progress, that the delightful field of moral influence, which the fine arts present, as well as of pleasurable and innocent amusement, will be more extensively cultivated? That a larger portion of our revenue, so often expended in those unrighteous conflicts, "in which no attribute of God can take part with us," shall encourage our native artists still further to adorn the halls of our country, not with military equipages and glittering steel, however beautiful those may be when not stained with blood, but with the peaceful ornaments of genius and taste? When our government, having relinquished the shadow of humanity and grasped the substance, the

arts of injustice, cruelty, and oppression, shall lose their attraction, and the fine arts, aided by the spirit of Christianity, shall lead the worshipping soul to adore the true, the virtuous, and the beautiful.

In the preceding humble tribute to the influence of the fine arts on the youthful character, we have anticipated, I conceive, the rank that justly belongs to them, in the formation of a classical taste. I proceed now to speak more fundamentally on the question; "By what means can a classical taste be cultivated in our common schools."

There is much force in the sentiment advanced by the author of "The Growth of Mind," that "Poetry springs from the fact that this world is the mirror of Him who made it." Independent of its poetic beauty, the thought is one of much interest. As an offspring of the Deity, the earth is an emblem of the perfections of the Godhead, in the lowest and simplest form; and, therefore, we may look to the external world, as one source of the earliest and tenderest impressions on the soul's sensibility. One of the manifestations of this sensibility is taste. One of its improved forms is a classic taste. Cultivate then in the young mind, nay, in the infant spirit, a love of natural beauty, by communing with nature.

It is interesting to trace the development of this sentiment, from the infant germ to a regulating principle of the understanding. At first, you behold the child tottering beside its teacher, with one hand clinging to the supporting arm, with the other plucking the little flower or the speckled blade. This is the early exhibition of the instinct. Its vision is downward, and, like its other powers, very limited. At length, its self-confidence with its physical strength increased, it runs about the mead with exstasy, to gratify the sportive love, which nature has so intimately combined with the soul's existence. But here the little spirit is not insensible to the fair forms of creation. The graceful spire, the polished stick, the rounded pebble, the circling shell—innumerable objects are presented, which the youthful eye distinguishes, on account of form, color, or other pleasing quality. How extensive is the early field of beauty, the little boy happily taught us, who came running in to his mother, one day, overjoyed at his treasure—a small striped snake, harmlessly and affectionately coiled in his bosom.

By and by the sphere of observation enlarges. The eye begins to turn heavenward. The waving of the branch and the grace of its form attract notice, the rolling of the silver or the

golden cloud, or their rich reflection on the watery mirror. With these the forms of animated nature combine, to charm by their splendid hues or swan-like curves; as was observed by one whose heart in childhood was open to these soothing influences, "the birds were her children, her play-things the flowers." At length the taste begins to harmonize with a more manly and practical sentiment, if I may so speak; demanding the accommodation of forms to their uses; combining beauty, strength, and convenience—or the adaptation of taste to the purposes and comforts of life.

It would be interesting to trace, more minutely, the progress of the mind, from the earlier to the later exercises of taste. Suffice it to say, that we have, in natural beauty, a most generous aid in developing the youthful sensibility, and imparting to it the power of correct discrimination. Custom, as if controlled, in this instance, by the dictate of nature, has wisely intrusted the childhood and early youth of the pupil to the gentler sex. Let then the affectionate guardian early inspire her charge with the love of nature in her most happy forms. This effort should be made, not in the occasional or accidental walk, but with as much regularity, as the weather and other circumstances permit. It should be one of the stated exercises of the school discipline, to converse with nature in her life and freshness. For the youngest pupil, something may be done to gratify and quicken its infant sensibility. For older pupils, intellectual and moral may be combined with physical pleasure. Before the hand is able to form a letter, the heart may be enriched with good feeling, and the understanding with the elements of useful truth. When the pupil has learnt to form letters and words, and write them intelligibly, let him associate them with pleasing natural objects. Let him write, for example, if there seated, The grass. The green grass. The spire of green grass. The color of green is beautiful, because it is the color of the grass. Or, A tree. An elm tree. The roots of an elm tree. The trunk of an elm tree. The branches of an elm tree. The strong roots of an elm tree. The venerable trunk of an elm tree. The bending branch of an elm tree. The branch of an elm tree waves gracefully.

This exercise, it is evident, may be carried to any extent, according to the age and attainments of the pupil. And if you glance, at times, from nature to art and say,

"The old oaken bucket, the iron-bound bucket,
The moss-cover'd bucket, that hangs in the well,"—

no harm will be done.

In this manner, I would very early accustom the mind of the pupil to the habit, not only of thinking, but of what seems oftentimes far more difficult, giving birth to the little thought, that it may breathe the atmosphere of the world, and be recognized as an existence. I have much faith, that not a little might be effected, in this or a similar manner, to lessen, if not banish the dread, with which the exercise of composition is so frequently regarded by the young mind—that dread, which is too often incorporated with the very growth of the student; till at length, as was said of an elegant scholar of our country, “he is found closeted, in all the horrors of composition.”

One of the richest treasures afforded by the united wealth of nature and art, is a well cultivated garden, disposed with neatness and taste. Happy is it for the city or town, which can number this among its sources of public comfort and refinement. There is a purity, as well as a hallowed association, about such a spot, which few scenes on earth possess. Shall we wonder, that “Lionardo da Vinci was walking in the gardens of Milan, when the immortal design of the Last Supper took possession of his soul?” From the planting of the Paradise of the Euphrates, an enchantment—an inspiration has been associated with the word.

Is your school so situated, that you have access to such a scene? resort to it; for there are influences treasured there, which shall not be lost upon the youthful heart. Is there any object of peculiar elegance? let its superiority be shown. Is there a want of pleasing arrangement in any of its parts? of convenience in its avenues? or of harmony in the intermingling of its various forms and colors? or of any principle of good taste? let the defect be made apparent to the mind of the pupil.

Allied to this influence, but of a still more chastened character, is that of a cemetery, where neatness and simplicity prevail. A very young sensibility may be affected by such a scene; and even where no more culture is found than generally marks the unadorned grave-yard of the New-England village, the circumstance that it is the depository of the dead—the resting-place of ashes once animated by the affections of virtue and truth—will not warrant us in denying its effect, in the formation of a classic taste.

As a people, it must be acknowledged, that we have not shown our regard for our fathers’ memories, in the care we have taken of their resting-place. The entangled feet, the

violated mound, the broken stone, the disfigured marble, too often bespeak an apparent indifference, far from commendable. Still it may be said with truth, perhaps, that so much attention was never paid to the burial grounds of our country, as at the present time. In our smaller towns, this interest is shown, not by any costly monuments, but by an increased attention to neatness and order—a happy manifestation of the improvement of the village taste. In cities and larger towns, this interest is shown in the appropriation of extensive grounds to the habitation of the dead, and in rendering those grounds inviting to the lover of natural and artificial grace, as well as consecrated to past affection. Who can look upon such a scene as Mount Auburn presents, in its loveliness and sanctity, and not deem it a privilege to the youthful student of the metropolis to wander there. After excepting that unreal gateway, which, in the expressive language of a lady of intelligence, makes you feel the truth of what the poet said :—

“ This world is all a fleeting show,
For man's delusion given,”—

after deducting every object defective in taste, or otherwise exceptionable, how many specimens of human skill remain simple, chaste, and beautiful? while all that pertains to nature, in her original, as well as cultivated charms, must breathe a refining influence.

As an important aid to this communion with nature, as well as for other benefits thereby conferred, I would earnestly advocate the introduction, into our common schools of the general, nay, almost universal exercise of drawing, and the sciences of botany and music, in their most easy and elementary principles. It is desirable, I think, that every district school in our country should afford instruction in these branches. If it be contended, that the last mentioned is a gift of nature, rather than the fruit of cultivation, (the truth of which sentiment I much doubt) and that such a regulation would deprive the community of some of its best teachers, this objection cannot apply to the others named; since they, surely, in their simplest principles, are accessible to every teacher qualified to impart elementary instruction. However rude or difficult such an introduction may appear, a little practice will render it easy and agreeable, and gradually cultivate a power by no means to be undervalued—that of imitating what is pleasing, or venerable, or otherwise interesting, in art or nature, and of looking with increased interest

on the skilful handicraft of man, or the wonderful works of God.

I cannot better plead the cause of music than in the simple anecdote furnished by Mrs. Sigourney. "An excellent clergyman, possessing much knowledge of human nature, instructed his large family of daughters, in the theory and practice of music. They were observed to be exceedingly amiable and happy. A friend inquired if there was any secret in his mode of education. He replied: "When any thing disturbs their temper, I say to them, sing, and if I hear them speaking against any one, I call them to sing to me, and so they have sung away all causes of discontent, and all disposition to scandal."

I have thus spoken of leading the mind of the pupil to a communion with nature, in her most pleasing forms. This view of the subject might be greatly extended, did circumstances permit. I would briefly allude to the school-room. If there be any spot within the sound of civilization, which has been cruelly neglected, it is the village school-room—a place too often more fitted for owls and bats, than for the improvement of the youthful spirit. There are school-houses in New-England, which many gentlemen would not consider fit receptacles for a carriage. My friends, this ought not so to be. In a country which boasts of its boundless forests, its inexhaustible timber lands, it is not honorable that the interior of any nursery of human virtue and taste should be destitute of the comforts and decencies of a stable. May not something be done to improve this state of things? Something, surely, may be done without invoking pecuniary aid. To say the least, and it is saying much where the blessing does not already exist, the scene of early labor might be cheered by that soothing and delightful comfort—the ornament of a classic shade. And even where the district is not disposed to grant the cheapest boon, something may always be done by the teacher. A good degree of cleanliness may be observed; of order in the movable articles of the apartment; indeed, of general neatness in the aspect of the room. This is an humble topic, but by no means foreign to the consideration of a refined taste.

It gives me pleasure to believe, that this, as well as the general subject of improvement in our common schools, is in able hands, and will make progress. Much good, I trust, has already been effected, and yet the sympathies of the community can hardly be said to coöperate. How many are there ready to smile at the conduct of one of the most intelligent parents

and scholars of our country, who, in the days of gingerbread men and women, would break the image into pieces, before he allowed his little daughter to eat it, lest the delicacy of the tender soul should be polluted? How many would not only smile at this, as an extreme and squeamish sensibility, but exclaim, absurd, ridiculous! How many have felt, and still feel, with the lady of the metropolis, distinguished, it is said, for general intelligence, who observed, that it was wrong to introduce any pleasing or interesting object into the school-room, since it would tend to distract the mind of the pupil, and disqualify it for more sober duties than looking at pretty objects. I would beg leave to develop the principle a little farther, and inquire, if there be any danger, lest the neat, not to say elegant furniture of a house, should divert the attention of the mistress of a family, or of her domestic, from a proper regard to the preparation of the table, or the discharge of other indispensable duties? The same person reprobated the practice of taking the youth of Boston into the country, as tending to relax that laudable discipline, which has come down to us from our fathers. We would respect the declaration of every conscientious sentiment, but hesitate not to observe, that the condemned excursion of one, two, or more hundred youth into the fair country, may have communicated more valuable instruction to the mind and heart, than was ever imparted in the same number of hours in the most fortunate school-room of that favored city.

I cannot but rejoice in this disposition to commune with nature, and mingle the luxuries of art with rural objects, even if it be in no more dignified form than the frolicksome ramble. Yea, I would rejoice in every thing, new or old, that looks like an appeal to taste or moral feeling. How sadly is the youthful spirit too often robbed of its due!

We acknowledge, that one of its earliest sentiments is the love of imitation, and talk of it as the creature of habit. But how does the practice of communities correspond with their doctrines? How frequently is the young soul treated, as though it neither possessed power in the one case, nor was exposed to evil in the other? How often might we explain the pupil's want of physical, intellectual, or moral refinement, as did a gentleman, in the southern part of Massachusetts, the poor boy's prodigality, when he observed to me "that he had spent hours in stitching 'Webster's Spelling Book,' with ribands of brown paper, where leather should have been used; thus sending the

book into the world, in a condition unfit for a philosopher to use, much less for the busy hands of childhood. Its weakness however was easily accounted for under the popular expression of the boy's abusive carelessness." May not this anecdote apply to the scene of youthful toil? Has not the forbidding aspect of that spot tended to banish from the mind of the pupil, that regard for local cleanliness, as well as neatness of person—that respect for comeliness, in every form, which a more pleasing scene might have cherished; and encouraged in its place that indifference to every object bearing the impress of taste, which must, in the nature of things, result from daily association with what is inconsistent with purity and refinement?

I proceed, now, to the consideration of that important department of our subject—the cultivation of a correct taste in English literature and English composition,—the power of appreciating the productions of literary genius and taste, and of communicating thought with force, with elegance and perspicuity. Of all school exercises, this is the last to be successfully performed. Indeed, under the happiest auspices, the cultivation of such a taste is little more than begun during the season of pupilage, to be advanced, as the soul makes progress "upward and onward;" as its sources of knowledge, and love of virtue, and power of observation increase. How shall this valuable acquisition be made?

It is not necessary, in this assembly, to speak of the intimate connexion of the moral feelings with the cultivation of a pure literary taste. There is one principle, however, which I notice as interwoven with every thing refined, as well as excellent,—the love of truth—without which, it is very difficult, nay, impossible to erect any structure of real and permanent grace. It is a principle of inestimable worth to the instructor, in all his efforts to improve the youthful character. How far can a mind be inspired with the love of knowledge, which is regardless of the truth? How far can it desire the acquisition of knowledge, farther than that acquisition appeals to self-interest?—a motive which no more constitutes the excellence of literature, than it does the sublimity of virtue. And how far could a mind be imbued with a love of mathematical truth, for example, or be led to cultivate a taste for elegant learning, or a pure style of expression, which possessed no sensibility to the beauty of simple truth?

Let then the youthful mind, that would form a correct taste in literature, be taught by every possible means, to consider this

great principle as a fundamental requisite to its real progress. I should doubt the genuine love of any thing pure, of any thing beautiful, in nature, art, or science, where this does not exist; since all truth, however varied in form, whether it be the simple utterance of the child, the delicate expression of a refined taste, the conception of a La Place, or the philanthropy of a Howard,—all truth bears the stamp of its family alliance—the seal upon its forehead—standing with its face heavenward. As between the twins of Siam, there was a cord—"a mystic thread of life," which bound them indissolubly together, yet did not destroy their individuality, freedom of thought and feeling, so between truth in morals and truth in literature, there is a bond of sympathy, which it is dangerous to sever.

One of the earliest means of cultivating a classic taste in this department, which suggests itself, is that of presenting to the mind of the young scholar, the most simple and pleasing truths, principally by conversation and communion with nature; improving, at the same time, every opportunity of appealing to the moral, as well as intellectual and physical constitution. As soon as the pupil is able to write intelligibly, the expression of thought in a legible form may be associated, as before suggested, with pleasing natural objects, particularly such as are distinguished for grace of form or color; accompanied by a brief and simple description of their most obvious properties. To these may be added, in due time, the record of scientific and moral truths, in their most plain and elementary shapes, taken from the lips of the teacher. Juvenile books, also, written in a very clear style, and pure in sentiment and expression, may now be called to lend their aid, in supplying the mind with facts, as well as increasing its power of expression.

When, at length, (to pass over the intermediate stages of the journey,) the soul in the progress of its early education, finds its little treasury so well filled, and its power of thought, reflection, and judgment, so far increased, as to begin to appreciate the beauties of standard English literature, a boundless field is thrown open to its intellectual and moral culture, as well as improvement in refined expression. The imagination, which, in earlier days, seemed to display itself occasionally, and accidentally, almost unknown in existence, and still less as an improvable faculty, begins now to develop itself as a noble endowment of the soul—a companion of its pleasures—an aid in its severer duties—a friend to its virtue and happiness.

Let it not be supposed, that this important faculty is the pro-

perty of a more refined or cultivated mind alone. It belongs to every intelligent being, of whatever age or capacity, who can trace a single mark of sublimity or beauty, in the works of nature or art. Let me speak a moment, in the language of Alison. "The beauty of sunset, in a fine autumnal evening, seems almost incapable of addition from any circumstance. The various and radiant coloring of the clouds, the soft light of the sun, that gives so rich a glow to every object on which it falls, the dark shades, with which it is contrasted, and the calm and deep repose, that seems to steal over universal nature, form altogether a scene, which serves, better than any other in the world, to satiate the imagination with delight. Yet there is no man, who does not know how great an addition this fine scene is capable of receiving from the circumstance of the evening bell." And what youthful ear could be deaf to that bell? or what heart unaffected by its association? And what rustic plough-boy makes no distinction between the noon-day horn, which summons the laborer to his repast, and that solemn sound of the stageman's midnight bugle, which gives notice, as he passes through the street, that some object of affection is about to depart from the familiar hearth to scenes unknown to Lang Syne? And what youth of ordinary powers would be insensible to that enchanting picture of "The Deserted Village:"

"Sweet was the sound, when oft at evening's close,
Up yonder hill, the village murmur rose.
There as I passed, with trembling steps and slow,
The mingled notes came softened from below.
The swain responsive, as the milk-maid sung,
The sober herd, that lowed to meet their young,
The noisy geese, that gabbled o'er the pool,
The playful children, just let loose from school,
The watch-dog's voice, that bayed the whispering wind,
And the loud laugh, that spoke the vacant mind."

Every pupil of ten or twelve years of age, possessed of ordinary talent may see, or be made to see, the pleasing group in this charming scene. The exercise of this ennobling faculty, then, I repeat, belongs to all the intelligent sons of God, and he who fails to cultivate it, or aid in its cultivation, closes an avenue to much pure and sublime pleasure.

In order to developpe this power, I would encourage its exercise, by every means calculated to direct or strengthen it. In addition to the external influences which may be rendered available, I would present the mind, daily, a portion of poetry or prose, from some writer of approved style and sentiment; or

require from the pupil a short selection, of a similar character, committed to paper. The object of this should be not so much to read the passage correctly and intelligibly, as to give it a simple analysis. Its various images should be pointed out, and their harmonious combinations, its tenderness of feeling, or delicacy of expression, or strength of conception, or elevation of sentiment, or other virtue of thought or construction. On the contrary, any literary, intellectual, or moral defect obvious to the mind of the teacher, should be made the subject of comment.

In connexion with these influences, I would urge as frequent intercourse as possible, with the best English and American writers, both in the form of silent and audible reading. In this exercise, I would include not only polite literature, but the pages of moral and scientific truth, and the most interesting portions of ancient and modern history. Surely the antiquities of Greece or Rome, need not be, and are not a sealed volume to the English student, because he reads not the original description. They are offered to us in our plain mother tongue; and who shall confine the justice of an Aristides, or the firmness of a Cato, the glory of the Parthenon, or the magnificence of the Coliseum, the shade of Academus or the music of Apollo and his band, or the physical, intellectual, and moral worth of those olden days, to the noble tongues in which they have come down to us? Might we not as well declare, that no one shall be a partaker in those classic scenes, who wears not the beard of the Greek, or the toga of the Roman? Or that no other than an American heart shall admire the life of him, who, although the father of one nation only, is the favorite of the world. Let the student in our common schools be introduced, by all means, to the great and good, the true and beautiful of all countries, as well as his own; and his bosom, also, shall glow with kindred sentiment, and his heart beat in unison with ancient as well as modern virtue.

In addition to this communion with the labors of others, that self-culture, so necessary to the advancement of every thing great or useful, if not more important than all other aids, must lend its constant and efficient influence. Under this great disciplinarian, what has the human mind effected? Without it, what has become of the most fortunate circumstances and the most splendid abilities? With it, what did a Franklin and a Bowditch? Without it, what has been left undone by a host of talent, now buried in uselessness and forgetfulness? With it, what

has that lover of foreign and domestic truth, in yonder central town, effected, in the midst of a laborious, manual occupation ; securing as the fruit of his early industry, the knowledge of more than fifty dialects, to such an extent, that he reads them with pleasure ? Without it, what has many a son of Harvard neglected to do, casting away the laboring oar, and floating in sluggish indifference, down the stream of time ? " God is not mocked. As a man soweth, so also shall he reap." That which made the philosopher and mathematician the ornaments and benefactors of their country and the world, will do something for every American youth of moderate ability, in every department of literary labor.

I have in the village, in which I reside, a beautiful illustration of this truth. There is an individual, who, for three score years and ten, has been storing his mind with the love and knowledge of the works of God. His name might be recognized by many of you, but its mention has nothing to do with our purpose. Unfettered, in a great degree, by the rules of art, he has surrendered himself to the study of the Book of Nature. On that sublime volume he has gazed, with the intensity of devoted love, and scanned its pages, with the eagerness of one, who is toiling for his daily bread. No line of that book, in any language, which is said to teach " the art of speaking and writing correctly," did he ever study, yet he has acquired the power of uttering the strong conceptions of his soul with a corresponding force, and of enunciating elegant, scientific, natural, and moral truth, with a strength and beauty, which no rules of criticism ever communicated. The dialects of olden days, and indeed of every other on earth, save his mother tongue, are to his vision, shrouded in darkness ; and yet his soul is rich in classic associations, as though his spirit had been partaker in the scenes and sentiments of antiquity. With a mind devoted to the search after truth, however, he has not withheld its energies from sympathy with human happiness and the common duties of life ; and he, who can measure the heavens by night, and the earth by day, who, at one time, can produce a system by which armies are marshalled, and, at another, a standing record of Indian days, is found also giving, with his still cunning hand, a fair diagram of the rustic plough ; delineating the length and depth of its curves with the accuracy of science, but with a perspicuity, not to be misunderstood by the common mechanic. Every event of peculiar interest, that transpires within the sphere of his reading or observation, in the social, civil, literary, scien-

tific, or moral world, becomes a subject for his graphic or critical pen ; and I know not that ten thousand pages would include his manuscript comments. Such is a brief, but not exaggerated description of a noble specimen of humanity ; and such is the fruit of faithful and persevering self-discipline.

The mode of conducting the exercise of composition, so called, from the expression of the early insulated thought in the form of the concise simple sentence, to the lengthened theme, with its more mature and connected thoughts, is so various, and so dependent on circumstances, that its direction must be left to the judgment of the teacher. But whether the discipline be in the shape of the transcript of another's mind, a record, from memory, of some simple story or pleasing little recital read by the teacher, or the sentiments of some writer of acknowledged worth and refinement, expressed in the pupil's own language, a translation from poetry to prose, the attempt at imitation of some style of uncommon excellence, or a purely original production from the scholar's treasury of ideas, or any other mode suggested to the mind of the instructor, let every form of vulgarity be subjected to unfailing criticism, and truth of sentiment, refinement of feeling, and delicacy, simplicity, transparency of language be earnestly inculcated.

Permit me here, briefly to comment on what appears to me a departure from the greatest purity of style, and to which even a juvenile theme should not be indifferent—that composite order of literary architecture, so to call it, interspersing the pages of English composition with foreign, living or dead, languages. It is true the ancients had a fair order composed of the united contributions of particular graces ; but then, it was purely Grecian, and not emblematic of many pages of our current literature. The lands of classic lore surely give no countenance to this custom of banishing the plain and forcible English, for the frequent obscurity, and even where not obscure, not always the more energetic language of foreign accent. Is it not an interesting truth on this point, if truth it be, as I think it is, that the great Roman orator, drawing as he had done so much of his literary nourishment from the soil of Greece, should not in all his judicial speeches, which have come down to us, not excepting that rich tribute to elegant literature, the defence of the poet Archias, have condescended to tell us by a single quotation, that he had studied the language of his illustrious predecessor. While the public speaker of our day seems oft-times to be dissatisfied with himself, and distrustful of the respect of his audi-

ence, till he has mingled some foreign accent with his excellent mother tongue. And in lighter compositions, in the popular and polite literature of the day, works dependent for circulation on the general patronage of the reading public, how often is the sentiment clothed in darkness, to three fifths of its readers, while to a majority of the remainder, little or no force, nor peculiar grace is imparted? I speak thus because I consider the subject of interest to the youthful English scholar; because I would have him feel the beauty and power of our language, and its adaptation to all his literary wants. And even to the adept in classic tongues, the forcible criticism of Miss Hannah More will do no harm: "The honey owes its exquisite richness to its not tasting individually of the rose, the jessamine, the carnation, or any of those sweets, of the very essence of all which it is compounded."

I am aware, that to many of the most distinguished and popular writers of our country this comment is inapplicable. That some of the most powerful productions of the moral press are as pure in style, as in sentiment. That some of the most charming sketches, ever delineated by the human hand, have been drawn by a quill from the American Eagle; and some of the most interesting journeys, from the scene of 'Rip Van Winkles' Dream' to 'Astoria,' have been performed with a staff from the American forest. I know too, that the beautiful Palmyrene letters as well as those which date from Rome, are purely English literature. Happy that it is so.

Neither am I unapprised, while commending our native tongue, that its comparative grace and dignity have been called in question; justly too, I would not deny, but not to the extent of some criticisms. Mr. John Quincy Adams, in his rhetorical lectures at Harvard University, contrasts our mother tongue with the Greek and Latin, as follows: "To see how these different idioms operate on the phraseology of the finest writers, compare the introductory words of the finest epic poets. The subject of Homer's Iliad is the wrath of Achilles, and in announcing it his first word is *menin*, wrath. That of his Odyssey to celebrate the character and relate the adventures of Ulysses. His first word is *andra*, the man. Virgil's Æneid as has been often remarked comprises subjects analogous to both those of Homer; war-like action and personal celebration. His first words are, *arma virumque*, arms and the man. Milton's subject was the disobedience and fall of man. But he could not like Homer and Virgil commence it in the first word of his,

poem. His language stopped him in the threshold. His words are "Of man's first disobedience." And thus a genius at least equal to those boasts of Greece and Rome, was compelled by the clumsy fabric of his language to commence his imperishable work by a miserable monosyllable, a preposition."

"I do not mean to say, that the noun or verbs must necessarily be the most emphatic word in every sentence. But as the one or the other must contain the most important part of the idea, in majority of cases, it is clear that a language, the idiom of which scarcely ever allows either of them to appear at the head of a sentence, must be inferior, in so far as it regards the expression of sentiment or passion, to a language, which leaves every word unshackled, and free to assert the rank which by its weight in the composition of the thought, it is entitled to hold."

With this criticism I cannot sympathize. Do the initial words of Milton distract the soul's attention, on the part of the reader or hearer, and present its concentration on the principal words of the sentence? They could not have done so, I think, in the great poet's estimation. It seems to me that Milton began thus, because he took no thought, nor cared, to begin otherwise. Had he so desired, might he not have sung

Man's first and fatal sin —

as well as Virgil

"Arms and the man ——"?"

Is not English literature full of instances of this emphatic arrangement of words in a sentence? I am contending, not for what would be futile, the equal force of the languages, but for a matter of fact, applicable to our case. Are there not thousands of examples, where both the first word and first syllable are emphatic? As much so as in the line from the bard of Avon :

"Honor—is the subject of my story."

or, as in the declaration of Peter at the Beautiful Gate :

"Silver and gold — have I none?"

or, as found in sentimental strains :

"Fare thee well—and if forever,
Still forever—fare thee well!"

or, as found in the hallowed union of tenderness and devotion :

"Tis like the memory left behind,
When loved ones breath their last"?

or, as in the salutation to a rural sabbath morn :

“ Hail, soothing and sacred repose ! ” ?

or, as in the animating notes :

“ Awake my soul stretch every nerve.”— ?

And when, again, the sacred lyre is tuned :

“ To prayer—to prayer—for the morning breaks,”

what spirit feels that its approach to the altar is impeded by the little, harmless image, that stands before it ?

As to the necessary connexion between an emphatic syllable or word in the commencement, and the subsequent force of the line or stanza, justice to our language requires us to state, that we acknowledge no such demand ; but, on the other hand, should be happy to welcome from the uninspired literature of any country ancient or modern, a more sublime and awful association of earthly and heavenly imagery, in more grand and sonorous diction, than one commencing with a little particle :

“ The Assyrian came down like a wolf on the fold— ”

Does any intellect desire more strength ? any imagination more fertility ? any sensibility more tenderness ? any taste more delicacy, than our mother tongue presents ? If not, as an act of patriotism, as well as philanthropy, when we borrow from the languages of other days or countries, let us express the sentiment, and I believe almost any sentiment on earth may be so expressed, in that blessed English, which a regard to the human understanding so generally demands. I was unwilling to pass this subject, since I do not think it foreign to the consideration of a classic taste.

In the early pilgrimage of life, as the understanding is developed in harmony with the affections, the child discovers a bright and morning star, set to gild its path, and if the eye of the soul can be fixed upon it, to guide its future wanderings. A writer on taste, who should neglect to refer to the volume of Divine inspiration, might be considered, by a christian audience, as deficient in judgment, refinement, or religious faith. I submit to the criticism ; at the same time that I cannot respond to all that is expressed by some of the lovers of truth and virtue, on this subject. The principles of our religion should be instilled, I think, from the earliest manifestations of intellectual and moral feeling ; not however, by the teacher's putting the written

word of God into the infant hand, but by taking the child gently into the arms, as Jesus did, and breathing a holy influence upon it. As a thorough grammar contains the major and minor principles, by which a correct writer must be governed, so does the word of God contain those pure and sublime truths, by which the conduct of a virtuous man will be regulated. But, as in the former case, we tune the youthful spirit to the harmony of sound and refinement of speech, by operating on its power of imitation, and by the elegance of conversation, long before we can apply the principles of language, in their written form, so must the little soul be charmed by the beauty of religious truth, through the medium of holy power from the lips, and hearts, and lives of those who love it, long before it can appreciate the written symbols of Divine Wisdom and Mercy.

Feeling as I do the truth of this view of the subject, I cannot be supposed to sympathise fully with the following extract from a recent letter, penned by one of the ablest jurists of our country—the effusion, I doubt not of a christian heart, and well stored with valued truth, but, like all human productions liable to imperfection. We notice the sentiments as representing those of a class in the community. Speaking of the public character of the American citizen, the writer observes :

“ This character will be determined by the influence impressed in youth, and perhaps no influences bear more strongly upon youth than those of the books they read. It is easy on this ground to account for the opposition of the enemies of religion, to the use of the Bible as a school book ; and this opposition of a sagacious enemy should lead us the more strenuously to urge its adoption into all the common schools of our country.”

“ It is no experiment that I would urge ; for it has been already tried with the most beneficial results. The fathers of our revolution were trained in common schools with the Bible for their principal, and generally their sole reading book. We confess our degeneracy from the high standard of those pure patriots ; but wherein has our education differed from theirs, except that we have discarded the Bible from our schools. In other countries the same results are seen. In Iceland, for example, though they have no common schools, their children are carefully instructed in the Bible, it being almost their only reading book ; and among no people are its precepts more familiarly referred to, or more conscientiously regarded.”

Of the effort mentioned in the extract, wholly to reject the Bible from our common schools, I was not aware ; and should

regret such an attempt as much as the writer. If the only alternative were *all* Bible or *no* Bible, I might choose the former. But a judicious use of the volume I should prefer to either.

In the domestic education of the Icelanders, there is, certainly, much to interest us. But the soil of that country differs not more from ours, than do the circumstances of its inhabitants—than I had almost said, their human nature does from ours. With great simplicity in mode of life, with few external incitements to physical indulgence, and few wants, that require much time to supply; with abundant leisure, within the pale of the domestic hearth, to attend to all the private duties of life, and still afford many hours, daily, for intellectual and moral culture, during the season of childhood and youth, and with few scenes, abroad, calculated to excite unhallowed passions, in manhood, and amid occasions, which generally, ‘try men’s souls,’—it may be, that there is not a country, on the face of the earth, better fitted for showing the good fruits of a purely domestic education, than happy Iceland.

How different is the scene in our republican, excitable government, when the great watch words—‘freedom of thought’—are sounded through the length and breadth of the land? How different too, from our father’s days. The sparse population has given place to dense multitudes. The puritan manners and habits have been succeeded by the usual attendants of wealth and outward prosperity. The strict domestic discipline of body and mind, which the fire-side afforded, in those primitive days, is, in a great degree, suspended; and the faithful, and always desirable instruction of that peculiar spot, is understood to be paid for in the person of the school-teacher: who, thus, instead of being a junior assistant, is made to assume an office, which nature intended should never be delegated. And when the season of pupilage has expired, and the active theatre of the citizen’s duty opens before him, the young American finds not now, as in revolutionary days, the public mind animated and absorbed by one great topic—the defence of our civil liberty—but tremendously agitated by the conflicting elements, which constitute our political atmosphere. Once, too, the authority of the sacred desk was as immaculate as that of the Delphic oracle. Now, its exhortation is: “Why even of yourselves, judge ye not what is right?” Thus might I draw a lengthened parallel, and at the end might say with justice, I think, that here—in the greatly altered state of our domestic habits, of civil and religious society, of the general condition of our country, and

not to any discontinuance of the use of the Bible, in our common schools—must be traced according to the law of cause and effect, a departure from the purity of our fathers' principles; if, in the words of the writer, "we confess our degeneracy from the high standard of those pure patriots."

As to the Bible, or the use of it in our common schools, or elsewhere, (and I would not in the remark, detract from the merit of the heroes of the revolution; nay, if in my power, I would, this day, establish a national gallery, in which, as in the Augustan forum of chiselled kings, should stand every patriot of that memorable epoch)—as to considering the Bible the moving cause or principle of the revolutionary action, it seems to me that to the doctrines of Lord North, rather than to those of the Lord Jesus, may be attributed a great share of the spirit of '76.

I beg not to be misunderstood. I cannot wish that the Bible should be no more than a common reading book of the school-room; that it should ever be used to teach a child to read; or, that it should be used, as I knew it, in my boyish days, as a secondary book, from which it was considered advancing a step, to be permitted to join a higher class reading, some compilation of human skill. This I should deprecate. But I would use the Bible, in the school-room, as I would elsewhere, as the first and greatest book.—The volume consecrated in the sight of Him, who inspired it—to be introduced to the youthful spirit, as soon as it becomes able to understand and appreciate its simple truths. Then all that is written with a sun-beam, as many of the holy pages are, I would present to the pupil, as a treasure to be bound to his heart. A Joseph should teach him the rewards of persevering integrity. A Daniel the security of principle, acting in obedience to the will of God. The leprosy of the servant of Elisha, the curse of Heaven against falsehood. A Haman, the wretchedness of an evil spirit. A Judas, the horrors of avarice and treachery. And, as he advanced to the pure life and religion of the Son of God, the graces of that character should be recommended with all the eloquence of the teacher's soul.

When, by these and kindred influences, the young spirit has made progress in understanding, and loving the truth, as also, in the power of appreciating literary beauties—fine language, fine thoughts, fine images,—I would introduce it to those portions of the Word of God, which are distinguished for elegance or power of expression, tenderness of feeling, greatness of thought, beauty of imagery, sublimity of scene, or rather alliance

with the grand or beautiful. Thus, briefly, would I endeavor to bring the most interesting events of Scripture before the mind of the pupil, and as I recommended the sentiment to his understanding and heart, the spot of earth, on which it was exhibited, should, if possible, become classic ground, or the language, in which it was portrayed, tend to cultivate a classic taste.

In this imperfect examination of a highly interesting subject, I have endeavored to refer to some of the prominent influences in the formation of a classic taste, or in the cultivation of its fundamental principles. In doing this, I have confined myself to those means, which are really and immediately available, and generally in the hands of the instructor; omitting those beyond the pale of his authority, many of which, as we well know, exercise great power over the young spirit, as for example, the conversation and refinement of the social circle, and the purifying scenes of domestic life; as also those, which an enthusiastic lover of his may anticipate, in her future course of improvement. How far the sanguine wishes of the reformer shall be realized, I know not, but I do believe, as firmly as in the existence of a God, that the permanency of our government is inseparable from its morality; and that he, who witnesses a general contempt of the latter, will soon behold the crumbling of the former. Subject, then, as we are, to the operation of that strong principle, "the will of the majority is law," and believing that this will must depend, in no small degree, on the judicious development of the youthful powers, not in the few and favored scenes presented by the more cultivated halls of science—the classical school, or the high school, or the richly supported private school—that not in these, but in the common school,

" 'Tis education forms the common mind,"

believing, too, that if knowledge is always power, it is not, necessarily, virtue, but that a good education consists in developing all the faculties of the soul; pledged, as we are to use our ability to advance the young mind to the attainment of virtue and happiness, as well as intelligence, and knowing that as we cultivate the love of the true and beautiful, we cast out the love of the false and base, is it not incumbent on us to employ all the means, which the internal and external worlds have furnished us for this purpose? Let, then, that gift of its Maker to the young heart—sensibility to beauty, in every shape, be cherished,—

By communing with nature, in her most pleasing forms ;

By contemplating those works of art, which bear the impress of genius, purity, and taste ;

By nurturing that love of truth, and those delicate and ennobling sentiments, which adorn and refine the character ;

By that culture of the imagination, which shall render this noble faculty, what it was intended to be, an aid to pleasurable, generous, and refined emotion ;

By holding that intercourse with the great and good actions, and the great and good thoughts, of past and present times, also, with scenes consecrated by virtue, which is permitted us through the medium of solid and elegant literature ;

By inculcating that self-discipline, without which, natural and artificial advantages exert but a faint, or even an unfavorable influence on the character ; and with which, almost nature itself may be conquered, and beauty be made to spring from ashes ;

By invoking those greater and lesser influences, which no human pen can describe, but which must be left to the soul of the teacher to exert, when he would lead the spirit of his pupil to that admiration of physical, intellectual, and moral beauty, which is the element of a Classic Taste.

Let this be done, and though the object of culture be one of our country's humblest sons, when that youth advances to manhood, however poor may be the cotter's door or gate-way, the ornament of the woodbine, or honey-suckle, or classic shade may not be wanting. Though limited his intellectual resources, that man's fire-side may be cheered by sensible, refined, and generous sentiment. Though tabernacled in a body brown with toil, that man's soul may be the temple of love to God and humanity. And when the hour of our country's peril comes, that man's patriotism may be found holding a shield before the integrity of our Republic.

LECTURE IV.

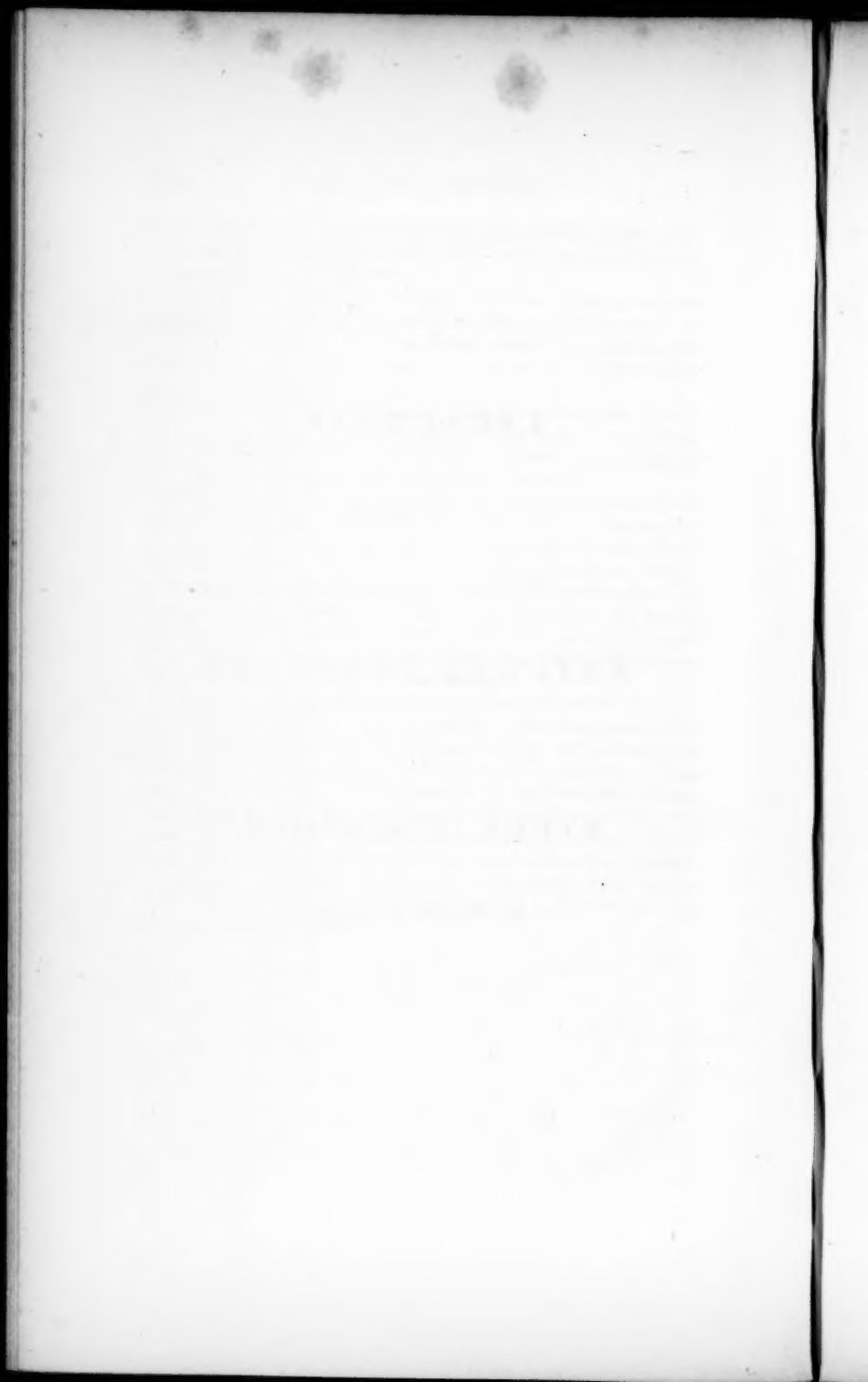
ON

NATURAL THEOLOGY

AS A

STUDY IN SCHOOLS.

By HENRY A. MILES.



NATURAL THEOLOGY AS A STUDY IN SCHOOLS.

"EST ANIMORUM INGENIORUMQUE NOSTRORUM NATURALE QUOD-
DAM QUASI PABULUM CONSIDERATIO CONTEMPLATIOQUE NATURÆ."

—Cicero.

I HAVE been requested to read a Lecture on "*Natural Theology as a Study in Schools.*"

Few subjects have so many important relations as this. I could here do but little more than barely name them if I attempted to survey its whole range. It has seemed to me that I should best discharge the duty to which I have been invited, by selecting one or two points, which appear to be most appropriate to the purposes of this Lecture.

It must be wholly unnecessary to take up any time in defining what is meant by "Natural Theology," or in pointing out what the precise study is which is thought of in connexion with schools. Every one is acquainted with the Treatise of Paley. That book will give us all a definite and sufficient idea of the subject.

Natural Theology is now taught, to some extent, in our colleges and in the best of our academies. I do not believe that it could be introduced with any advantage into our common schools, while in their present state. But with their present state, no one, I presume, is satisfied. The friends of popular education seem to be deeply convinced that these schools may be made far more efficient in preparing the young to meet the duties of life, and answer the purposes of their being. We hope soon to have a better order of teachers, trained up expressly for their office. We hope soon to possess improved

books and methods of instruction. We hope that soon, in consequence of the growing interest in their welfare, much longer time will, every year, be given to our common schools. When these hopes are realised, the prosperity of the cause of common education will demand an *enlargement* of the course of study. And among the new subjects that will be added to the brief and meagre list to which our schools have been so long confined, it seems to me that Natural Theology should take a place. I believe that it is entitled to a prominent place in every well-devised system of school instruction. This is the point to which I would now ask your attention.

In selecting studies for the young, there is one rule which must invariably be regarded. We must give preference to those which, while they are adapted to the capacities of children, will both inspire them with a love of inquiry, and will task and train the powers of their minds. Now it is true, I think, that the study of Natural Theology is well fitted to interest and improve a child's mind.

1. In the first place, it is something in its favor, in this point of view, that it directs the attention to objects of the external senses—a flower, a tree, a bird, an insect, every thing in which we see marks of contrivance and skill. Now children love to exercise their senses of feeling and seeing. Objects which appeal to these may much earlier, and certainly will more deeply, engage the *attention*, than objects of abstract thought. And it is a consideration to be by no means omitted, that the objects with which Natural Theology is conversant, are not merely presented to the child's senses occasionally, like the philosophical apparatus of a school, but lie continually before his eyes. They were objects of interest and affection before they were objects of study. The truths pertaining to them are, therefore, less likely to be forgotten as soon as the hour of recitation has passed. They will be suggested to the mind, and imprinted deeply upon it, by all that the child sees in his daily walks and plays.

2. In the second place, this study awakens the *curiosity*, and inspires the mind with a *love of inquiry*. I doubt whether, in this respect, they are surpassed by any other studies whatever. I think the experience of every competent teacher, who has fairly made the trial, will confirm this. Suppose he has given a simple conversational lecture—for example, on the eye. He has described it as an instrument having an external aperture to admit the rays of light, which pass through different lenses, made and arranged in the exactest manner, according to the

laws of optics, which at length form an image upon a dark membrane in the bottom of the eye, connected by the optic nerve with the brain. Let him show that this instrument, by a wonderful contrivance, can open or contract its external orifice, according as it has a deficiency or excess of light. Let him explain how it has power to change the relative position of its lenses according to the nearness or remoteness of the object it surveys. Let him ask why it is placed in this strong bony cavity; why it is imbedded in its soft movable cushion of flesh; why it is sheltered by the "thatched penthouse" of the eyebrows; why it is furnished with a beautiful curtain which defends it, and wipes it, and closes it; and why it is washed with a secretion that keeps it moist and clean. Let him illustrate the consummate wisdom and skill displayed in the structure of this instrument, by remarking its power to compress a landscape of four or five miles square, "into the space of half an inch in diameter, preserving its whole multitude of objects, discriminating their magnitudes, positions, figures, colors;" and that, occupying the most advantageous position in our bodies, it is ever ready for use, without the least care from us, without our once thinking of the almost inconceivable rapidity and perfection of its movement.

Now no teacher can go through with a clear description of this wonderful series of contrivances, and point out the evidences, of which there are here so many, of the knowledge, handiwork, and goodness of the Great Contriver, and find that he is addressing himself to dull or wandering minds. The attention is fully awake, curiosity is intense, and the mind, so far from flagging behind, and needing to be coaxed or spurred on—its too common state—flies forward in advance of your guidance, and with the liveliest interest anticipates your suggestions. And what I would have you especially observe is, the permanent effect of this kind of teaching upon the spirit of the child's mind. It prompts it to inquire for itself, makes it love to study that it may see designs, contrivances and ends, of its own finding out. And this *inquiring* spirit, this *love of study*, it is the very highest aim and purpose of all education to inspire. Indeed, nothing is really done till this be done. By fear of disgrace or the rivalries of ambition you may make a child for a while distinguished for its wonderful attainments; but how often, when these motives are withdrawn, do we see the fire of intellect well nigh smothered and dead by the load you have imposed. But once kindle the vital spark by the love of study

for itself, and it burns with an ever-living, self-sustaining flame, and no limit can you assign to its progress.

3. In the third place, this study favors the formation of habits of careful *observation* and *discrimination*. It summons our attention to beautiful evidences of contrivance, care, and love, in the minutest objects around us, in the habits of an insect or a plant, in appearances and changes amid the countless objects of nature, which we are apt to pass by unheeded. They who give much thought to these things, do acquire a power of seeing and comparing, which is one of the most valuable gifts that a good education can confer. I think it a great defect in all our schools, that so little is done to train the mind to an acquisition like this. Are not the general habits of study in these schools characterised as heedless, unobservant, indiscriminating? And what is the consequence? Only in an age or two comes there a true seer. Some of the most valuable discoveries that have been made, were found out by those who were distinguished from other men only in this, that *they* knew how to use their eyes. And when we remember how much, in the whole business of life, a right judgment depends upon habits of careful comparing and distinguishing, we shall conclude that those studies which are friendly to such habits, deserve to be encouraged.

4. In the fourth place, the study of Natural Theology is peculiarly favorable to strengthening the *memory*. This is a point which I need no more than name. What I have already said will prove its truth. When the attention is fixed, the curiosity is awakened, and the mind observes and discriminates closely, every one must see that all impressions must be deeply engraved. What a vast multitude of objects, phenomena, laws, and names, does the memory of those who cultivate any of the Natural Sciences soon learn to retain?

5. In the fifth place, this study improves the mind through the effect it has upon the *moral* nature of the child. This is a point altogether too important to be wholly passed by, and yet so great is it that it is impossible I should here do any thing like justice to it. I can only suggest one or two particulars, as illustrative of the tendency to which I refer. Open the eyes of a young man to see how full this universe is of the presence of mysterious wisdom and power, and he bows down in *humility*. If we would know what connexion humility has with the cultivation of his intellect, let us compare Newton, feeling that he was like a child, who had picked up but one little pebble on the

great shore of truth, and even that could not fully comprehend, with the smatterer, who, with that "dangerous thing," a "little learning," feels that he knows all that he can know, or at least needs to know, and we shall see that one of the essential conditions of patient inquiry and ever advancing progress, is humbleness of mind. "The meek he will guide in judgment, the meek he will teach his way." The feeling of *wonder*, also, which an acquaintance with the truths of Natural Theology so much inspires, is in the highest degree friendly to intellectual culture. You shall see one man travel from Dan to Beersheba and declare all is barren, miracle has ceased, mystery has been explained, and the great volume of nature deserves no more notice than a child's thumb-worn, and dog-leaved book. You shall see another find, in the commonest things around him, food for wonder, meditation, inquiry, and mental excitement. And of these two minds who can doubt which will perish through absolute rust, and which is destined to an upward and onward path? I may allude to the feelings of *reverence, gratitude, trust, and love*, awakened by the evidences in nature of God's being and attributes, as having a like beneficial effect upon the culture of the mind. They keep its powers free from any disturbing passions, they furnish a healthful, and constant, and self-sustaining excitement to them, and are continually summoning them to new tasks by an ever-growing desire to know more of Him, by whose inspiration their own light was kindled.

The several considerations which have now been stated, seem to me to establish the point which I undertook to prove—that the study of Natural Theology is peculiarly well fitted to interest and improve a child's mind. And if their importance has not been overstated, I think that they intimate to us that some change is desirable in our whole system of early instruction. I fear that we give far too much time to what must be to children the merest, dullest, and deadening abstractions. "*Res non verba*," should be, more than it is, the teacher's motto. Cicero has said that "the study and contemplation of nature is the natural food of the mind," and it is not unreasonable, at least, to think that the Being who has given us our mental faculties, has supplied us with the very best means of nourishing them, in those wonderful works of his, which every where invite their curiosity and task their strength.

But something more is to be said in favor of the study of Natural Theology, than that it interests and improves the mind. It is a further recommendation of it that it lays up an unailing

source of the highest and purest pleasure. I doubt whether we ever experience more intellectual gratification, than when we discover a new contrivance or end in some very familiar object. This is the gratification which he who studies nature, to see evidences of a higher wisdom and skill, continually enjoys. The means of supplying it are inexhaustible. They lie in every man's path, they are connected with every work of the Unseen Power which he beholds, from the sublimest movements of the universe, to the humblest worm and weed beneath his feet. The habit formed in early life of observing these objects, and of studying into their wise and beautiful designs, would be carried to maturer years, and would give to manhood invaluable resources of intellectual occupation and enjoyment. How would it dignify opulent leisure, and grace and sweeten the intervals of humble toil. Wherever man went he would see something to awaken his curiosity, and to call into healthy and pleasurable action all the best powers of his mind. Never would time hang heavy on his hands, never would hours of leisure be marked with what is so often seen—a miserable, shiftless, restless turning from object to object, because men know not what to do. He would have an occupation to which, from the stern demands of toil, he would gladly turn; an occupation that would fill him with delight, truly worthy of a rational creature's enjoyment, renewing its pleasures at every step he advanced, and opening a boundless prospect of knowledge and happiness before him. The effect of these studies, also, to elevate the taste should be distinctly named. He that loves to commune with nature, will partake in his own soul of the purity of her works. Her calm spirit will quell the turbulence of his passions, the beautiful order of her course will give harmony to the order of his life, and in holding out to us such higher objects of pursuit, her influence will be to moderate our craving and unsatisfying eagerness for mere worldly gain. Spread abroad in any community a taste for a devout study of Nature, and its fruits will soon be seen. You give an interest and importance to every hour of unoccupied time, its pleasures are more rational, public amusements are more refined, the graces of thought and sentiment gild the stern necessities of life, and man lives for higher and nobler ends.

I have now spoken of the influence of the study of Natural Theology upon the cultivation of the mind and taste. But all true education recognizes something higher in man than either the intellect or the taste. And if its object be to *lead out all* the fac-

ulties with which a child's nature has been endowed, why should not that reverence, that admiration, that gratitude, that love, which delight to trace out evidences of God's existence, and power, and wisdom, and goodness, in his works, receive culture, directly and for their own sake, just as much as the faculty of language or of numbers? That capacity, call it by what name you will, by which we feel connected with the Supreme Being, is just as much a part of our common nature, as the capacity of memory. All history shows this. We might appeal for a proof of it to the hearts of those very persons who deny it. The superstitions which, in some form or other, are seen to exist with those whose higher natures have been totally uneducated, should teach us how innate and ineradicable, and how much in need of enlightened culture, are those faculties which connect us all with the unseen and eternal.

If then the object of education be to bring out the whole man, why should all culture of a large class, and of the highest order of man's innate powers, be completely banished from our schools? We are all quick to see how imperfectly that human being would be educated, who, whatever was his knowledge of the wonderful works of God, could not, through ignorance, transact the commonest business between man and man. But is not he far more a mere fraction of humanity, who can indeed barter, enumerate, and adjust his affairs ever so well, but has no eye to see, no heart to feel, the beauty, the wisdom, the goodness, with which on all sides he stands encompassed? For what purpose hath the great Author of his being, with such boundless prodigality, given the handiwork of his contrivance and skill even to every weed, worm, and pebble in man's path, and with continual invitation tempted him to explore the treasures of an infinite power and love with which the universe is filled? He is defrauded of the best part of his inheritance, whose heart has not been awakened to admire, to adore. His destiny was to be an interpreter, worshipper, and priest, in this Temple of Nature in the midst of which he is placed. But his education has not given him the least consciousness of his high calling, nor does it concern itself to point out to him one token of that higher Presence with which this temple is filled.

If these remarks are just, we must see, I think, that it has been a great and fatal error to banish religious instruction from our common schools. To exclude the dogmas and prejudices of a sect, it is not necessary to exclude religion itself. The truths of Natural Theology are wholly independent of all questions of

ecclesiastical strife. They relate, exclusively, to the existence and attributes of God, and are held in common by all of every name. Nor will it do to say that the Pulpit, and the Sunday School, should be the sole agents for teaching these truths. Here is the very evil against which we protest—that religious instruction is not made a part of the common, daily business of education, that it is pushed altogether aside to one or two hours on the Sabbath, that hence it becomes appropriated and formal, and that thus while the mere knowing faculties of the child are drilled continually, the higher and guiding powers of his soul are left stunted and dwarfed. How obvious is it that these never can have that proportion of culture—which, if the object of education be to perfect the whole man, is properly theirs, until we admit their right to have at least an equal chance of attention, and some enlightened, and careful, and thorough means of training them are employed, in the course of the every day processes of school education.

And here I must be permitted to say, that on this whole subject of religious education in our common schools, there appears to be an apathy in the public mind, which, in a Christian Commonwealth like ours, is somewhat surprising. I speak not now of that law in our Statute Book which requires of all instructors in our schools “to exert their best endeavors—as the enactment reads—to impress on the minds of children and youth committed to their care, the principles of piety.” One would think that there was a higher law than this written on every parent’s heart, which would tolerate no teacher, who was faithless to this solemn duty. And yet by a careful examination of facts, it was found in 1837, that, excepting the Bible, which is used, as we all know, for the most part, merely as an exercise for reading, no books whatever had been introduced to give, and so far as appears, no pains whatever had been taken to receive, religious instruction in our common schools, except in five or six towns, in the whole State.* Every one knows the reason. It is the intolerance of our dogmas and prejudices. And thus while we are disputing what *body* we will give to religion, and wherewithal she shall be clothed, her heavenly *spirit* wings its flight to more peaceful, loving hearts, and leaves us a form, beautiful perhaps in all the proportions of truth, clad in the simple, venerable attire in which it was first received upon the earth, but—alas! for this defect—it is dead.

* See First Report of the Secretary of the Board of Education.

In these most unhappy disputes, I believe, nevertheless, that something may be done. A study like that which, throughout this Lecture I have contemplated, confined exclusively to unfolding the evidences of the being and attributes of God as seen in a minute, thorough, and careful study of his works, and simply inculcating the sentiments of reverence, and gratitude, and trust, and love, which all hearts should cherish—can it not, by and by, be introduced into all our schools? Is not this study that high, broad table-land, on which we all alike stand, and from which we all start, each to strike out into his own path, through woods and brush, and over perilous, slippery places, in pursuit of his own party and sect. I am persuaded, that through Natural Theology, religious education may be brought into our schools; and an enlightened, connected, thorough study of this subject, is certainly the least that we ought to do for the culture of the religious nature of the young.

It deserves also to be considered, that the study of Natural Theology would lay a deep and firm foundation for the truths of Revealed Religion. For one, I am afraid that we are committing a great mistake in the religious education of the young. I cannot think it strange that there should be so many upon whom the study of the Bible has no more effect, and who by it are not impressed with the solemn interests they have in the truth of the being and character of God. Nature is the "*elder scripture*," and I believe it should prepare the way for the *written*. Bacon has said, "God never wrought a miracle to convince an atheist." He has stamped his image and superscription" on every one of his works. And until we go to the scriptures with hearts deeply penetrated with the being and providence of God, we do not go to them in the state which they presuppose, in a state which is necessary to see and appreciate the truths which they have brought to light. But when we see "the invisible things of Him" by the "things that are made," when we feel that we want confirmation of the truths and the hopes uttered by a voice that has "no speech nor language," but whose "line has gone out through all the earth," we shall repair to the Bible with something of that feeling, with which Plato and Socrates longed for a messenger from the gods. "One Bible, I know, of whose plenary inspiration doubt is not so much as possible, nay, with my own eyes I have seen the God's-hand-writing it."* The other Bible we shall welcome, when we can see that it has the like signature to show that it is from above.

* Sartor Resartus.

We will take notice of but one other recommendation of the study of Natural Theology as a part of the religious education of the young. I refer to its power to impress religious truth upon the deepest feelings of the heart. On this subject nothing can equal the admirable words of Paley. "Physicians tell us"—says he—"that there is a great deal of difference between taking a medicine, and the medicine getting into the constitution. A difference not unlike which obtains with respect to those great moral propositions which ought to form the directing principles of human conduct. It is one thing to assent to a proposition of this sort, another, and a very different thing, to have properly imbibed its influence. I take the case"—he continues—"to be this. Perhaps almost every man living has a particular train of thought, into which his mind glides and falls when at leisure from the impressions and ideas that occasionally excite it; perhaps, also, the train of thought here spoken of, more than any other thing, determines the character. It is of the utmost consequence, therefore, that this property of our constitution be well regulated. Now it is by frequent or continued meditation upon a subject, by placing it in different points of view, by induction of particulars, by variety of examples, by applying principles to the solution of phenomena, by dwelling upon proofs and consequences, that mental exercise is drawn into any particular channel. It is by these means, at least, that we have any power over it. And in a moral view I shall not I believe be contradicted when I say, that if one train of thinking be more desirable than another, it is that which regards the phenomena of nature with a constant reference to a supreme, intelligent Author. To have made this the ruling, habitual sentiment of our minds, is to have laid the foundation of every thing which is religious. The change is no less than this, that whereas formerly God was seldom in our thoughts, we can now scarcely look upon any thing, without perceiving its relation to him. The world thenceforth becomes a temple, and life itself one continued act of adoration."*

I have now spoken upon the *importance* of Natural Theology as a study in schools, and have remarked upon its power to interest and improve the mind, to elevate the taste, and to aid in the religious education of the heart.

There is one other point upon which I intended to offer a few observations—the manner in which this subject should be

* Conclusion of his Natural Theology.

taught. Some very brief suggestions are all that I shall have time to make.

It is obvious, that as a careful, connected study, Natural Theology is suitable only to the higher classes in our schools. As for a text-book, we have, I think, no work which is just what is to be desired. Paley's, it must be admitted, is the best. In clearness and attractiveness of style, in simplicity and pertinency of illustration, it remains unsurpassed. But it is defective in omitting in the range of discussion, some of the most interesting and important branches of the subject, and is rendered more unsuitable, as a text-book in schools, by the controversial spirit in which it is written. He plunges at once into the depths of the most abstruse arguments against atheism; and no sooner do you find your feelings of admiration kindled in the presence of some beautiful fact or law of nature, than you have the chilling image of some unfeeling chaos-loving skeptic thrust before you. I doubt whether this frequent reference to the follies of atheism, in Paley's book, ever did much good to any body, certainly it can do none to children.

But Natural Theology may be otherwise taught than as a connected study. It may be introduced in the form of a general lesson to the whole school. A flower, an insect, a stone, a thunder-storm, a shower, the dew, any object, and any phenomenon of nature, may furnish a topic of simple description and remark, and will be attended with all the good effects I have claimed for this study, improving the mind, elevating the taste, and awakening the religious emotions of children. In this way, a love of nature may be instilled, which will invite those more scientific investigations that may follow.

I have been pleased to learn that this is the method adopted in the common schools in Prussia, to teach the young a love of the religious contemplation of nature. In a report on the state of these schools made to the General Assembly of the State of Ohio, and republished by order of the Legislature of this Commonwealth, we are told that a garden is sometimes given to a class for a lesson. "They are asked the size of the garden, its shape, which they may draw on a slate with a pencil—whether there are trees in it—what the different parts of a tree are—what parts grow in the spring, and what parts decay in autumn, and what parts remain the same throughout the winter—whether any of the trees are fruit trees—what fruits they bear—when they ripen—how they look and taste—what plants and roots there are in the garden, and what use is made of them. The teacher will

then read the description of the garden of Eden—sing a hymn with them, the imagery of which is taken from the fruits and blossoms of a garden, and explain to them how kind and bountiful God is who gives us such wholesome plants and fruits, and such beautiful flowers for our nourishment and gratification.” Following out this hint, we see that the external heavens make another interesting lesson—the sky, its appearance and color at different times—the clouds, their varying form and movements—the sun, its rising and setting, its concealment by clouds, its warming the earth and giving it life and fertility—the moon, and the stars, their light, and changes and distance. The surface of the earth may be the subject of another lesson, its mountains, valleys, oceans, rivers, cataracts, caverns, volcanoes, tides—all as illustrating the power and wisdom of Him who made them. In like manner, the beauty and variety of the plants and flowers with which the earth is adorned, the creation, nourishment, habits, and instincts of animals, the phenomena of light and color, of the air and of the winds, and of countless other familiar but interesting objects, may each engage attention.

But it is unnecessary that I should pursue these suggestions any further. The instructor who only understands this subject and who in his heart feels its importance, will make for himself the best ways of teaching it. And thus finally we are brought back to that point on which so many plans of an improved education must depend for their success. We must have a better order of teachers. And when these can be furnished to our common schools, Natural Theology will receive that large share of attention which its intrinsic importance demands.

LECTURE V.

ON THE

**DIVISION OF LABOR
IN INSTRUCTION.**

By THOMAS CUSHING, Jr.

THE HISTORY OF THE

REIGN OF

CHARLES THE FIRST

BY JOHN BURNET

DIVISION OF LABOR IN INSTRUCTION.

THE nature of the subject assigned me by your Committee of Arrangements, not admitting of any attempt at rhetorical elegance or ornament, I shall offer no apology for the directness and simplicity of the statements and inferences which I am about to lay before you.

These, if correct, will, I think, show, that the principle of the *division of labor* is of great importance in conducting the business of instruction. Reasoning from analogy, any attentive observer of the various processes that are carried on around him in the fields of business and labor, can hardly fail to conclude, that this principle, so universally applied in conducting the various branches of modern industry, is capable of being successfully used in the management of schools of almost every description.

It is not my intention, for it is unnecessary, to bring forward any instances of the advantageous application of this principle in the conduct and result of any of the mechanical or other processes; they are sufficiently evident to any one who walks through the world with his eyes open. Dispense with it, and we are thrown back into a state of primitive simplicity, almost of barbarism. I do not think it too much to assert, that, wherever the division of labor has been judiciously applied in any of the arts, the business in hand will be conducted with less expenditure of time and labor in proportion to the amount of the product; and that this product will be superior in kind to what can otherwise be obtained. To show that this principle can be applied in a greater degree, perhaps, than is generally supposed, to the processes of instruction, and that the result of its judicious application, will be of the character just mentioned, is the object of this lecture.

It must depend upon various circumstances, *how far* the management and instruction of a school may be divided among several persons. To do it to any considerable extent requires a density of population sufficient to allow of a large number of pupils being collected on one spot, or the bringing them together as temporary residents at the place of education. The character of the school and the nature of the instruction to be given, must also be taken into consideration. To *what degree*, then, the business of instruction may be divided, can only be decided by the character and wants of the people among whom schools are to be instituted. I wish now to show the special advantages of such a division, where it is proposed to give a complete course of school instruction, and where scholars can be collected in numbers sufficient to warrant its introduction.

To do this, I must suppose, as types of the two kinds of institutions, two schools, in one of which the labor is not divided, and in the other of which it is. I do not know how more conveniently to designate these, than as a *small*, and a *large* school. These terms are, to be sure, relative, in their signification; but by a small school, I mean such a one as is usually taught by one teacher of, say, from twenty to forty scholars; and by a large school, one where several teachers are employed, of from one to two hundred scholars. To make any calculations, it will be necessary to go considerably into detail, and to assume certain data which are intended to be as near the truth as possible, or at least, not to err on the side of extravagance.

What then is the mode of proceeding in what has been called the small school, where all the duty devolves upon a single teacher, and where instruction is given, according to the demands of the community, in many branches? If the scholars vary in age, as is usually the case, from ten to sixteen years, they cannot well be divided into less than four classes; if the pupils are destined for different pursuits in life, and do not attend to the same course of study, a greater subdivision than this, will be found necessary. If each class have three exercises a day, the teacher will have to hear twelve recitations. These must necessarily be carried on in the same room where the classes not engaged with him, are pursuing their studies. He has thus, at the same time, to give attention to the exercises of the classes, to attend to the discipline of the school, and to answer the many questions and applications to which a teacher is constantly subject. There is also a great deal of miscellaneous business constantly arising in a school; there are pens to mend, notes to answer, callers on busi-

ness to attend to, and many other interruptions, which those who have had any experience in teaching, will readily supply. Now it can easily be seen that the teacher thus situated, must be very actively employed from the beginning to the end of the longest school day ; and, that work diligently as he may, he will find himself obliged to cut short his recitations, to omit the explanations and illustrations that he would gladly give, and to adopt a summary mode of discipline, that cannot pause to examine cases and become acquainted with individual character. His load of recitations is constantly pressing upon him, and he needs the eyes of an Argus and the hands of a Briareus, to get through with all that he feels that he ought to do for his pupils. Should he be indisposed, he must either drag through the day as he can, or close the school ; should he be seriously ill, his school must be temporarily suspended, or confided to a stranger.

I have made this outline as brief as possible, that the mode of proceeding and the position of the teacher in such a school, may present itself clearly to your minds. Let me now set as briefly before you, in what manner a large school may be conducted, where the division of labor is introduced.

Let a school be supposed of four or five times the size of the one just sketched, where all the branches usually attended to at school, are taught ; where pupils are fitted for the University or for the other walks of life. Suppose that this school is instructed by four teachers ; that to one of these, whom we shall designate as the principal, is assigned the control and direction of the institution, the selection of studies, the choice of books, the administering of the discipline, the charge of the correspondence and intercourse with parents and others, and, in addition to this such a share in the teaching, as these duties will leave him time for ; and that the other teachers give instruction in the three departments of English, mathematical, and classical studies. This school will require for its proper accommodation, a room or hall of sufficient size to accommodate all the pupils ; and rooms of quite a moderate size, for the teachers of each of the departments. The exercises might, perhaps, be all carried on in one room, but not with nearly so much comfort and success. The hall must be furnished with such fixtures, as will accommodate the scholars as the place of general rendezvous, where books, &c. are to be kept, lessons to be studied, lectures and general instructions listened to, and such other exercises performed as can be attended to most conveniently, *en masse*. The recitation rooms will need only

seats for a small number, and such apparatus as the departments require.

How may the pupils be employed during the day in such an establishment as this? The whole number can meet in the morning in the hall, and attend to such exercises as may be thought appropriate for opening the school. Such general directions as are needful, or comments upon the occurrences of the preceding day, may then be made by the principal. Some exercises, perhaps, in which the whole school can unite, may also be performed. At an appointed hour, classes may be sent to each of the teachers. If the school is divided into six classes, half of the number is thus disposed of; another sixth may attend to some exercise with the principal; the remainder attend to such duties as do not require the constant attention of the teacher, such as writing, ciphering, and the preparation of lessons. At the end of the time allotted for recitation, the classes that have been engaged with the teachers, return, and either go to another exercise, or remain and attend to their duties in the hall. At convenient intervals, classes may be released for relaxation and amusement. This system supposes an arrangement, previously made, of classes and hours, and fully understood both by teachers and pupils, so that no time need be lost in waiting for orders, or for pupils to be instructed. If sufficient attention is paid to this arrangement, there need be no jarring of classes, or time wasted; the pupils may attend each teacher daily, and have sufficient time besides for the preparation of lessons, for play and general instruction. At the close of the school, they may all be brought together to hear any remarks from the principal, and be dismissed with appropriate exercises.

Having thus briefly, and, I hope, intelligibly, given the outline of a school where the labor is divided, I wish to institute a comparison between it and the one previously described.

In the first place, in regard to the *amount* of instruction received. It is sometimes urged by those who have not examined the matter carefully, that, in a small school, the pupil receives a greater amount of direct instruction from the teacher and that there is less chance of deficiencies escaping notice. If this be so, it is certainly a great advantage, as the wants and improvement of the individual, are the objects to be kept constantly in view. But is it really the case? According to the estimate made of the amount of time that the unassisted teacher could devote to each of his classes, supposing him to have but four, each class might be engaged one hour and a half, in recitation or class ex-

ercises, if the school exercises occupied six hours, and no time were lost by the teacher through miscellaneous business or interruptions of any kind. But, if instruction in the ancient or modern languages, is attempted in the school, the number of classes must, almost of necessity, be greater. I heard not long since of a high school, of about thirty scholars in the vicinity of Boston, in which there were no less than seventeen classes. This, no doubt, was an extreme case; but it will often occur that instruction is desired for a small number, and sometimes for an individual, in some branch to which the rest of the school do not attend; or that scholars are presented, whose attainments do not permit them to join immediately any of the regular classes. In such a case a new class must be formed, and, a new demand being thus made upon the time of the teacher, the time of the rest, is, of consequence, diminished. But making the most favorable supposition, namely, that the school can be reduced to four classes, each class can receive one and a half hour's instruction from the teacher daily.

Now how stands the case in the large school? If it is divided into six classes, each can receive one hour's instruction from each teacher, daily, besides such instruction or general attention as the principal is able to give. The classes thus receive more than double the amount of personal attention. Is it thought desirable to form a class in any other branches than those mentioned as the common course of the school, instruction can be given by one of the teachers at an hour not occupied by the regular recitations; or, should the demand be sufficient, by an additional teacher employed for as much time as may be found necessary. It is easy, in this way, to introduce several of the modern languages, music and other branches, which would otherwise occupy an amount of time disproportionate to the number to be instructed, or, most probably, could not be introduced at all. By arrangements of this kind, those pupils who are able to make due preparation in out of school hours, may be employed during the greater part of the school-day in receiving instruction. This, however, would seldom be desirable. Under such a system of instruction, attention can be paid to many minutiae to which it would be altogether unreasonable to expect the unaided teacher to pay any regard. It seems to require no further demonstration to show that the scholar must receive at least twice, and can usually receive three times as much direct instruction in the large school as in the small one.

Secondly, in regard to the *quality* of the instruction given. It seems to be no more than natural, that teachers choosing branches

with reference to their own natural fitness and acquired proficiency, should, at the outset, be better able to give thorough instruction, and to impart an interest in the study, than where there is no choice about the matter, but every thing must come before the mind and eye of one person, however little he may be adapted to impart instruction in some of the branches. But, this apart, would not the teacher of a single branch, or set of cognate branches, have an opportunity to go more deeply and thoroughly into them, to teach more upon fixed principles, and to bring more of illustration to bear upon his subjects, than where the attention is more divided? The analogy of the mechanic arts seems to teach that this is the case. Here skill of various kinds is employed for the more thorough and speedy performance of the labor. The power of machinery and the muscular strength of the man, may perform the heavier portion of the work, while the more delicate hand of the woman or child, may be advantageously employed in adding the ornamental part of the fabric. So different kinds of talent find their sphere in the different departments of teaching. A man may be an excellent teacher of mathematics and the exact sciences, who would be entirely unfit to give instruction in rhetoric and elocution; another may be very competent to give instruction in penmanship or drawing, who would be entirely at a loss in the languages; and there are some who are fine scholars and competent teachers, who are not adapted to the management and discipline of a school. While the constitution of the mind remains unchanged, teachers need not blush to say, "*non omnia possumus omnes*."

Is it not then expedient, in the important work of education, to make as much talent as possible available, in bringing about a thorough and satisfactory result? Let every man put his hand to the work in that field where his labors can be of most avail, and sow the seed of that fruit which his own mind bears most readily and copiously. It is hardly necessary to say, that in teaching, as in other things, the common adage, "*practice makes perfect*," is entirely applicable. This principle is, in fact, recognized in our colleges, where appropriate spheres of labor are filled by men particularly qualified by their natural bent of mind and appropriate training.

So far, then, as depends upon the fitness and thorough preparation of the teacher, this system seems to offer no inconsiderable advantages. But this is not all that tends to improve the quality of the teaching. The position of the teacher is highly favorable to thorough instruction. He is not liable to interruption by visits

or the calls of business ; his mind is not distracted by compulsory attention to the management and wants of other pupils than those actually under instruction ; he is not hurried and anxious about the time to be spared to each class, for that is a matter of definite arrangement ; if desirable, he can have a breathing time between his recitations ; in fine, he knows exactly what he has got to do, and how long a time he shall have to do it in. From the combination of all these favorable circumstances, it seems almost necessarily to result, that teaching of a higher order can be practised than the position of a teacher in a small school, will possibly admit of, however great his skill and strong his inclination to do his utmost for the benefit of his pupils. A more extended course of education in more branches, may be introduced, without detriment to those in the lower grades, and without omitting that attention to minutiae, that is so important in the earlier stages. With competent men, I do not see why the school course may not be made very nearly as extensive, and to the full, as thorough, as that pursued in our colleges ; for, if the community wish and will pay for it, arrangements may easily be made, in such schools, to provide instruction for pupils of almost any age or degree of advancement.

The only objection that occurs to me, against instruction given in the manner described, is, that it necessarily implies that the classes must be large, at least in those studies that are attended to by the school generally. This, it may be urged, is an objection, that counterbalances the advantage derived from the greater amount of time given to each. Now, that a class may be made too large for thorough instruction and the constant responsibility of the pupil, is not impossible ; but where the proportion of pupils to teachers, is about that which we assumed, one hundred and fifty of the former to four of the latter, for instance, there need be no inferiority in the instruction on this account. In some studies, in which the pupil is to learn by attention chiefly, the size of the class makes little difference. In reading, for instance, all the examples given by the teacher, his illustrations and criticisms can be as well attended to by a class of twenty as by one of two ; while, among a number, there will be that variety of performance, that will enable him to cover much broader ground in his remarks. In spelling, according to one of the most approved methods, where every word is written by every one engaged in the exercise, as many may take part as can hear the voice of the teacher. In teaching the elements of vocal music, a large number may be taught with equal facility as a small one,

the eye and the ear being chiefly appealed to. So in the explanations of the principles on which any science is founded, and in the illustrations, either by maps, diagrams, scientific apparatus, or by oral instruction, as many can be benefited as can conveniently see and hear. It is in managing those recitations, in which the pupil is called upon to exhibit by his answers the preparation that he has made, that the difficulty lies. Here, certainly, classes must not be made so large as to afford a strong chance of escaping altogether from examination, or the possibility of knowing with certainty when each one's turn is to come. In effecting this, the practical skill and acuteness of the teacher is brought into play. Were it my object, at present, to describe modes of instruction, I might give some hints in what manner the due preparation and mental activity during the recitation of each scholar may be secured. But it will probably be found a fact, that from twelve to twenty is not too great a number to compose a class in such studies. Among such a number, there is a greater chance that a portion will be able to do all that is expected of them, and make the standard of duty high. This is important; the actual performance of some of their number, is a much better proof of what can be done by scholars than any merely theoretical standard of the teacher. From some little experience, I have had the greatest satisfaction from the largest classes, and would rather be responsible for the improvement of a class of twelve boys, in Latin or Greek, for instance, than of a single scholar.

This question seems to have been sufficiently tested by the successful operation of such schools as have been established in Europe and among us, upon this principle. More thorough scholars are produced, especially in those branches where certain forms and principles are to be much dwelt upon, such as the languages and mathematics, than where the attention of the teacher is bestowed upon a single pupil, or a very small number. A sort of sympathy and life is developed in the recitation of a considerable number under skilful management that is highly beneficial. I will merely mention, as one instance, that in the Public Latin School, in Boston, whose scholars have been considered very thorough in their preparation for college, the number of pupils in the divisions, when the school is full, is from fifteen to twenty.

If a large class, then, can be as well taught as a small one, the teacher must feel greater satisfaction in the result, as his time has been expended to more purpose.

Thirdly, in regard to the *discipline* of the large school compared with the small one. Perhaps it may seem, at first sight, that its size will have an unfavorable effect upon the general good order and exactness in the requisition and performance of duty. But this, we believe, to be by no means necessarily the case. It is true, that much will depend upon the competency, promptness, and thoroughness of him in whose hands are the arrangement and management of the school. But this is only saying what may be said, with equal truth, of any school, of any size, or of any other establishment, where a certain course of discipline is to be maintained and administered. Competent persons must be found to fill such situations; (and it is intended presently to show, that this system tends to provide and qualify men competent to fill them;) but in the hands of such, it is maintained, that there need be no relaxation, and as little neglect of duty, as can be attained under any system. What does analogy teach us here? Is it found that discipline is necessarily relaxed, and exactness in duty dispensed with, in proportion to the numbers that are brought under its requisitions? Is not the reverse usually the case? Is not the object of one of the neighboring manufacturing establishments, namely, the production of certain fabrics and the enriching the owners thereby, as well effected under the control of one competent superintendent, with a sufficient number of subordinates, with one system of regulations and requisitions, as if it were divided into five or six establishments, distributed in different parts of the town, and going on independent of each other? The practice of all manufacturing districts sufficiently answers that question. Or, to use another illustration, is it found that the discipline of a man-of-war is relaxed in proportion to the number of her guns; so that the sloop or the frigate is proportionably better managed than the seventy-four or hundred gun ship? Experience answers this question too. With a competent head, a sufficient number of inferiors and wholesome regulations, with a place and duty for every man, the size of the ship need be limited only by the skill of the builder to construct, and the power of hemp, wood and iron, to bear the shocks of the elements.

But, further than this, it is maintained that our plan offers positive advantages for the most thorough management of a school. The single teacher labors under this disadvantage; that he cannot devote much time to the management of his school, without feeling that there is an amount of work accumulating

that he can ill dispose of, or that some exercises must be omitted altogether. This feeling makes him loath to stop the exercises of his school to investigate breaches of order, to scrutinize individual peculiarities of conduct, and to draw fit moral lessons from passing events. Now, all this is very possible in the large school. He, whose province it is to direct, may, if he pleases, have a time set apart for attending to such cases as require particular notice, and for giving the necessary reproof, counsel, or punishment; being thus able to give greater consideration to individual character and make the necessary allowances. He may have a definite time for addressing the pupils on topics of morality or order, thus bringing his powers of persuasion to strengthen his positive laws. He is thus able to give that moral instruction which is now so much demanded, but for which it is so difficult to make any adequate provision in schools of the usual kind. Neither will he, necessarily, be overwhelmed and worn down by the great number in the school-room. If the plan of the school be brought to mind, it will be remembered, that there will be, for the greater part of the day, but a portion of the pupils, from one half to one third, in the common hall; while the changes that hourly take place, the alternations of different studies, and of work and play, may also have a favorable effect by banishing idleness, and giving some relief to that restlessness, which, caused by long sitting and the want of variety, is the source of most of the minor school offences, and, consequently, of much trouble and annoyance to the teacher.

This system, to be effective, supposes a constant communication between the principal and the heads of the departments, by which all cases of misdemeanor and neglect, may be brought promptly under his notice. By this means he will be acquainted with the progress and conduct of every pupil in each department, and will hold, in his own hand, the ends of all the threads by which the pupil is united to the establishment.

Perhaps it may be worthy of remark, that pride in their school, and a desire to maintain its credit, is more apt to be excited among the scholars in a permanent and well-known establishment, where, perhaps, some of the highest talent has been developed, and where merit of various kinds, is likely to be brought together, than in one of another description. A high standard of excellence is thus kept before their eyes, and an honorable ambition aroused not to fall below it, that has none of the injurious effects of emulation, as usually excited. The school-boy should look with reverence on the halls that have been at-

tended by those whom he looks up to, as the great men of his community, or country, and have all the honorable feelings of his nature called into action by the associations that cluster around them.

Fourthly, it remains to institute a comparison between the two systems, in regard to *economy*. If it can be shown, that, to the public, the education of their children will cost less in large establishments, whether public or private, while the teacher will be as well, or better compensated for his labors, it will be an important part of our argument. In the first place, if houses are to be built to be occupied as schools, it will be found that the cost of erection will not be directly as the number to be accommodated ; that is, four small school-houses will cost more than one that will receive as many as all of them, if the site, materials and style of building be equally good. This could easily be proved by going into calculations about the prices of building-materials, labor, &c. ; but this is hardly necessary. I believe that those who have any practical knowledge on the subject, will corroborate my assertion. In general, I believe it is found more economical to erect as few separate buildings as possible for the carrying on of a certain amount of business. Here, then, is a saving at the beginning. The same will be found true in regard to many other items of school expense ; a more systematic economy can usually be practised in large establishments of all sorts. Much school apparatus, such as large maps, philosophical and chemical instruments, diagrams, &c. can be used for the benefit of many as well as of a few, and can, consequently, be better afforded in a large school. A much more complete apparatus can thus be provided, so that the scholars can derive more benefit at a less expense.

All that is saved in the ways above-mentioned, can be devoted by the public to raising the standard of education, and to the more liberal compensation of teachers. It seems, then, to be for the interest of all towns and school districts, whose size and population allow of it, to concentrate their means upon the erection of one edifice of a size sufficient to accommodate all their children ; for the smaller ones who can be more conveniently taught by one or more female teachers, can be accommodated beneath the same roof, and perhaps receive some benefit from the system and arrangements of the establishment ; their studies, certainly, may be prescribed with reference to their future reception into the upper school, and the time of the transfer being decided by the teacher's opinion of their fitness, they will not be liable to lose time by

being kept too long in the rudiments, nor to be forced prematurely into the higher branches. Some of the rooms of such a school-house, may also be used for other purposes, such as lectures, the meetings of societies, or town purposes, and something may be saved in this manner. The public schools in the city of Boston, are organized somewhat upon this principle. The houses are large and expensively built. They are considered full when four hundred pupils are under instruction, though many more than this are often received. This number is thoroughly instructed in the usual branches of an English education, at an expense of about four thousand dollars per annum, for the salaries of the teachers, and about two thousand more for the interest of the money invested, and other expenses; being much less than equivalent amount of instruction could possibly be obtained, in that city, in small establishments. Thus a better education is obtained, at a less expense, while the teacher is more generously supported.

Having examined the workings of the system when the division of labor is introduced, in regard to the amount and quality of the instruction given, the facilities afforded for good government, and the expense, at which an education can be obtained, I do not see any reason to doubt, that the moral, intellectual and physical interests of the pupil, are, at least, as well cared for, as under any other system; if our statements and deductions are correct, it seems to follow necessarily, that they are far better provided for. But if the pupil fares only equally well, I think it can be shown, that the interests of the teacher alone, his comfort, his permanence and respectability render it preferable.

In the first place, he is exempted from that constant hurry and distraction of attention that tend to make the business wearisome, and its results unsatisfactory. What more calculated to make the teacher discontented with his lot than the consciousness that he can never quite roll his stone to the top of the hill and gain a sufficient standing time to put in practice some of those plans for the benefit of his pupils that are constantly occurring to him; that, do what he may, he cannot realize his own idea of teaching, and send out thorough scholars into the world; and, that, though he do his utmost, the unsympathizing public are dissatisfied with him, because he cannot do what it is impossible for the mind and hands of one man to accomplish? It is this, we apprehend, that has given currency to the opinion, that teaching is necessarily more irksome and laborious than other sedentary occupations, and almost sure to wear out those engaged in it. Is

it not probable that this deleterious influence is produced by the distraction of thought and attention, and great responsibility to which the young teacher, in entering upon the sole charge of a school is subjected? With a reasonable time, a comfortable place, and an undisturbed and placid state of mind, it seems that the operations of a school can be carried on without making too great a draught upon the strength of any one of moderate intellectual and physical endurance. Could these advantages be attained, many valuable men might be retained in the business, whom the unpleasant labor and experience of a few months or years, at present, drives into other occupations.

The young teacher, too, is often subjected to annoyance from those persons, wise in their own conceit, who are always ready to give the benefit of their sage counsel to any one entering upon the duties of the office; but, as they usually differ in opinion, only place him in the embarrassing situation of being obliged to disoblige all whose advice he does not follow. He is thus exposed, at the outset, to the danger of making enemies and having parties formed for and against him, upon the most inconsiderable grounds. Now, if he commences his career under the guidance of a man of established reputation and experience, he is free from all this annoyance, and instead of the onerous responsibility to a many-minded public, is responsible only to his conscience for the faithful discharge of a prescribed line of duty. It may easily happen, in fact, nothing is more natural than that the young teacher should not instinctively fall upon the best methods of teaching and governing a school; for the power to teach in the best manner does not come by nature more than any other skill. He will spend much time in finding out that which the experience of another might have taught him, and will thus be exposed to the unpleasant reflection, that his first scholars must have suffered, while undergoing the experiments that showed him his errors. Now, experiments of this kind are not like those in natural philosophy or science, which, if unsuccessful, involve no greater loss than the value of the materials and the time of the experimenter. The misdirected efforts of the child, can never be recalled, nor the wrong done his mind, atoned for; his school years are rapidly passing away, and the acquired skill of the teacher will nought avail him. Such experiments are as bad for those suffering under them, as would be the conduct of an ignorant person who, taking a stock of medicines, should go among the sick and try to gain the knowledge of the educated physician, by experiment.

It is small consolation to those who suffer under such treatment, that he eventually finds out what will cure and what will kill.

This mortification, arising from the consciousness of duty unfulfilled, may be spared the man who is willing to commence his labors under the direction of another, more experienced than himself. If he labor in but one department at a time and commence with the best theoretical methods, he will be able to accomplish himself in the practice, in a comparatively short space of time. He will have an opportunity to become acquainted with the modes of instruction practised in the different departments, by observation and exchange of work, and with the general management and routine of a school. He will be able to discipline his temper and habits to the requisite degree of kindness and patience; no small part of the teacher's preparation. He will thus gradually qualify himself for the more difficult and responsible post of an independent instructor, or the principal of another establishment where the same system is to be put in practice.

Is not this plan likely to form thorough and permanent teachers, and thereby increase the respectability and usefulness of the profession? I say *permanent* teachers; for to carry out this system successfully, it is absolutely necessary that the principal, at least, should be permanent. The interests at stake are too great, and the qualifications required too numerous, to allow of any man's being employed, who proposes teaching only a short time, with his heart in something else. Thus a number of men of the best capacities for teaching, will be kept permanently engaged in it, and their establishments will afford the best means of forming and sending out teachers that will do honor to the employment. By securing a body of permanent teachers, we gain the greatest security that some progress will be made in the science of teaching. When each man has to begin *de novo*, and has no sooner attained a little experience than he quits the employment, what opportunity is there for progress? Which of the mechanic arts has made advances and produced satisfactory results by such a course? In which of them, in fact, would the plan be tolerated of a man's taking it up, impromptu, as it were, and pretending to vie with the workman of apprenticeship and experience. Just imagine a man extemporizing the making of a watch, or even the shoeing of a horse! Under such circumstances, teaching will be stationary in its methods and imperfect in its execution. It cannot rank as a science, because the very idea of a science is, of a body of knowledge, already acquired on any subject, arranged systema-

tically under appropriate heads, which, those who are devoted to it, feel it their duty and pleasure constantly to augment.

This plan of forming teachers does not come into opposition with that proposed in Teacher's Seminaries. Those educated in them will need an opportunity to put in practice the theoretical systems of teaching, which they have acquired, and an opportunity is thus afforded them. It seems hardly possible to employ inexperienced and temporary teachers with safety, elsewhere than in some subordinate capacity, under skillful direction.

Is it said in opposition to this system, that it makes the young teacher too subordinate; that the position is not sufficiently independent to allow young men of spirit to place themselves in it; that the dignity and respectability of the office, are diminished by not grasping at once the entire control and responsibility of a school? To objections like these it may be answered, that more respect is shown for the office, when those who propose filling it, think it necessary to make careful preparation for it, and do not thrust themselves forward to fill stations for which they are by no means prepared; and that more respect is shown by the community, when it insists upon having men of thorough preparation and long experience for its posts of honor and profit; and that the profession will never be so much respected, as when this is admitted and acted upon by both parties. That nowhere else is it thought necessary for a young man of spirit to rush forward and claim situations that are due to his superiors in knowledge and experience; that to scale the ladder of promotion in the military or naval service, for instance, is the work of a good part of a man's life; and, that in these professions, strict deference and submission to superiors, are considered honorable rather than the contrary. Were the same principles adopted in our public institutions for education, the effect would be highly advantageous, as promotion in the service would be made to depend upon experience and merit, rather than caprice or personal influence. Then young teachers would not be so constantly desirous of change and of springing at a leap to the top of the ladder, when it was felt that there was a fair prospect of attaining it by patience, and that their just claims would not be disregarded. When large establishments, such as have been described, are in existence, the highest posts are well worth careful preparation and patient waiting for, while many intermediate positions are open to different degrees of education and experience. The more mechanical duties may thus be thrown

upon those who are beginning their apprenticeship, and the time of the more able be devoted especially to those labors that require ampler knowledge and maturer powers. Let there be, then, as far as possible, in institutions for education, different grades of labor and emolument, each of which is to be reached by the patient and successful permanence of the duties of that below it. In this way, the competence, permanence, and consequent respectability of teachers, will be best provided for.

If, then, our statements are well founded, and our inferences correctly drawn, it follows, that the interests of the pupil, the teacher and the public, are best subserved by introducing, as far as practicable, the principle of the division of labor, in the organization and instruction of schools.

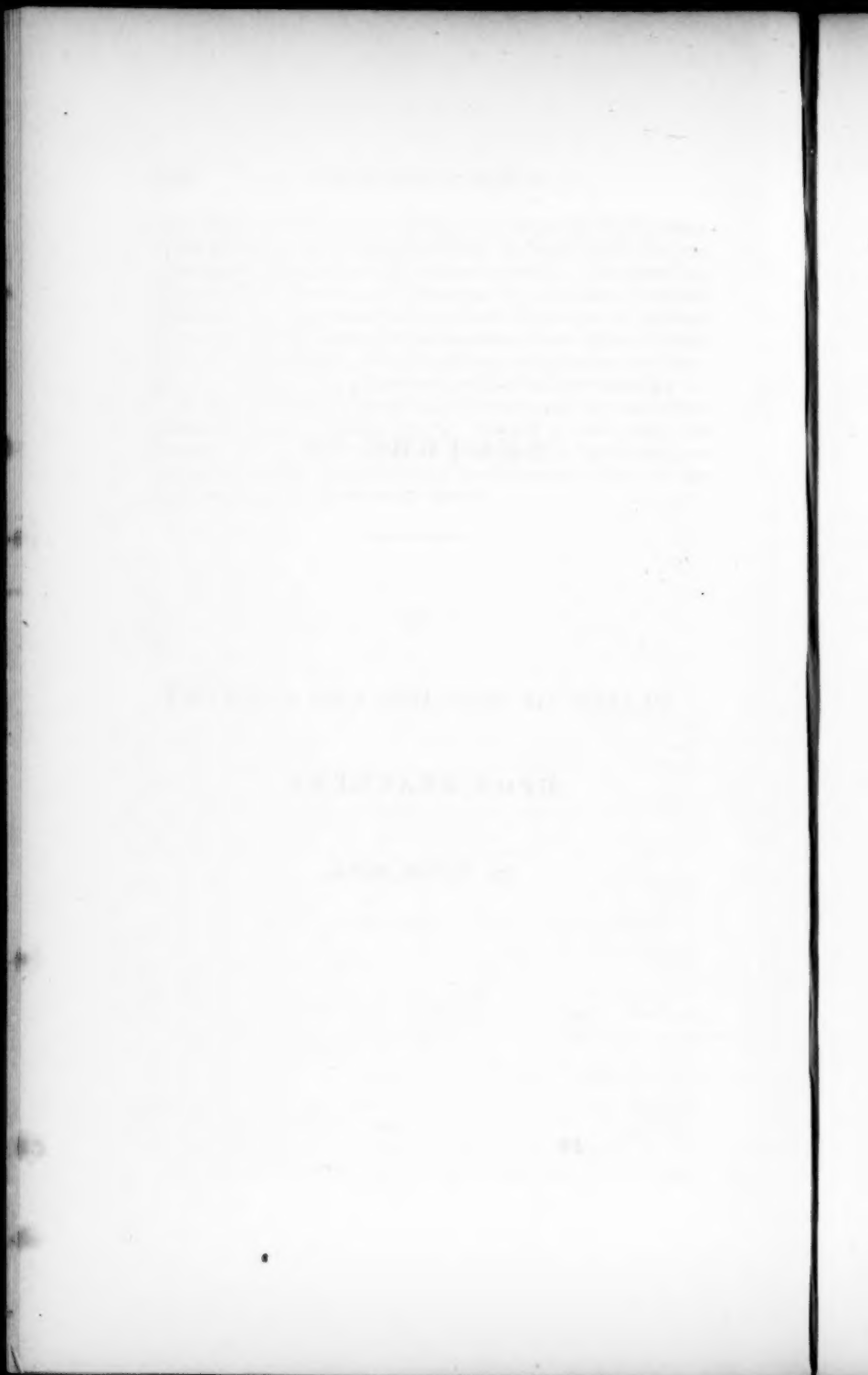
LECTURE VI.

THE

CLAIMS OF OUR AGE AND COUNTRY

UPON TEACHERS.

By DAVID MACK.



THE CLAIMS OF OUR AGE AND COUNTRY UPON TEACHERS.

As individual man proceeds through infancy, childhood, and youth, and by successive degrees of maturity, advances to the accomplishment of his destiny—so collective man, mankind, has a progressive advancement towards civilization, or a gradual progress in it.

Individuals are often visited by disease or casualties that retard or cut off their progress—more frequently, are obstructed on their course and bound in chains which their own follies and vices have fastened on themselves.—Yet we do not, therefore, doubt that development is the law of man's individual nature.

Nations may be, often have been turned back in the march of improvement, or swept from the community of nations, by the consequences of their own vices—but, therefore, we do not doubt that advancement in civilization, is the law of mankind.

As it is the province of teachers to bring the minds of their pupils under the influence of this law, both of individual and of social progress,—every age and country may justly claim of its teachers that they co-operate to the extent of their influence, with the causes that Providence, through the lapse of ages, and by the instrumentality of preceding generations, has seen fit to establish for the advancement of mankind. Teachers, then must understand the civilization of the age and country in which they live, or how can they advance its progress? Were a savage, a Hindoo, a Mahometan and a Christian, to be educated by an intelligent teacher—he would, in each case, vary and adapt to the character of each pupil's civilization, the motives,

he would most press ; the errors, most combat ; the truths, he would most elucidate. Nor can the civilization of any age or country be determined, when considered by itself—but only when deduced from all that has preceded—since all that has been developed in man, has conspired to make man what he is. This *all*, could never be fully comprehended in its detail and endless relations, were it arranged and printed in some mammoth Encyclopedia. Happily, the great divisions, the *leading facts*, are more comprehensible, and intelligible. Upon some of these, enough to serve as the basis of our discourse, we will briefly remark.

The **FIRST** fact we shall notice, is, that mankind have, from the earliest periods of history, been progressively becoming *one family*. In remote antiquity, the world was peopled by tribes and nations living in a state of constant hostility, each regarding all others as Gentiles and barbarians, without any common bond of union. In this same state savage nations still exist. From time to time, there were established empires, that formed a more or less lasting bond of union for large portions of the race. What Conquerors and Dynasties thus forcibly commenced, Religion has cherished and cemented more effectively, though more quietly, and from its nature, is destined to advance, until mankind shall regard all its various members as they have ever been in the contemplation of Providence, **ONE FAMILY**.

The great and rapidly increasing preponderance of Christian civilization in the world—is the **SECOND FACT** for our consideration.

Whatever can be called a *Religion, binds together*, in a community of principles and motives, those who embrace it ; and marks the civilization of its respective votaries, by more palpable characteristics than race or climate. For instance, there is a much greater affinity in the tastes, pursuits, institutions and character, of the Haytians and Europeans, than between the latter and any nation belonging to either of the other two civilizations ; because the Haytians and Europeans are in common impelled by principles and motives inherent in Christianity. We observe in Christian nations a lofty aspiration after something higher and better, that is not *satiated*, but *inflamed* by success. Christian civilization now encircles the globe, having under its direct influence Europe and America, the north of Asia, and numerous vantage grounds throughout Asia, Africa, and the Islands of the Sea. Yearly, are new millions brought more and more under its influence, whilst the other

civilizations seem to be in their dotage, to make no new conquests, and to be without inherent vitality to resist impending dissolution.

Christian missionaries and commercial intercourse are fast cementing the influence gained by conquest and political intrigue; and already Christian civilization is acting *directly* upon much the largest portion of the human family; *indirectly*, but *effectively*, upon mankind.

We notice, as a **THIRD** fact, that Christianity is also gaining greater ascendancy over Christian civilization.

Christian nations have begun to think that international difficulties may be adjusted by negotiation *without war*, better than with war—that war rather increases than diminishes mutual differences, and that *both* parties are worse off for mutually lacerating each other's dearest interests. Some Christians have gone so far as to insist, that war and revenge are contrary to the spirit of Christianity.

What is called the Law of Nations, is constantly becoming less *unchristian*, as applied to warfare, and indeed all international intercourse.

If national legislatures have not professed to be governed by the obligations of Christianity in their civil polity, and domestic legislation—they have, in signal instances, yielded to the form of Christian principle imposed upon them from abroad—the petitions and projects thus pressed upon the consideration of legislatures, daily accumulate power, constantly become more and more such as indicate a greater ascendancy of Christianity over Christian civilization.

Voluntary associations and individual effort to promote objects based upon Christian philanthropy, daily multiplying, and enlisting constantly increasing energies in Christendom, are powerfully influencing public opinion, giving a tone to literature, and silently, but effectively, marshaling the energies of Christendom to serve under the banners of the Prince of Peace, in the cause of *Universal Man*. That men are poor, ignorant and oppressed, is more and more recognized as a reason for being actively interested in their behalf.

FOURTH fact. The political condition of the private citizen has advanced from that of abject slavery, through the vassalage of Feudalism, to the recognition of rights as strongly guaranteed as those of any other class. Titled aristocracy, the last remnant of political despotism, is day by day shorn of its splendor and prerogatives in the *old* world; whilst in the *new*, if there be, in defiance of Christianity, in opposition

to the spirit of the age, and in contradiction to our own Constitution, an atrocious aristocracy of *race*, there is also springing up, with unprecedented vigor and determination, a spirit, which, with the aid of Christian principle, the united voice of the rest of Christendom, and the Providence of God, plainly pointing to such a result, must soon become the spirit of our institutions *practically*, as it has been for sixty years *theoretically*. It is plainly the tendency of Christian civilization to abolish all political distinctions.

FIFTH fact. The social condition of men, as respects their habitations, clothing, food, and whatever may be included under the necessities and comforts of life, has been progressively advancing, from the destitution of the houseless, naked, half-starved savage, to the abundance and comfort of the present day; and in *these* respects, is now improving with unprecedented rapidity. Some of the most potent agents in these social improvements, are, probably, yet in their infancy, and results may be about to be realized, which, if suddenly developed, would as much surprise us now living, as did the first fire canoe, on the waters of the Missouri, the aboriginal dwellers on its banks.

SIXTH fact. The means of education are better, more numerous, and more within the reach of all, than at any former period. Instead of oral tradition, figures traced in sand, or wax, or metal, or wisdom dimly discerned through the medium of a foreign language, we have the accumulated wisdom and experience of all ages, in the vernacular tongue of each Christian nation, daily brought more and more within the reach of all. The grand and beautiful phenomena of nature, now explained by familiar science, no longer affright or bewilder. Instead of a conflicting chaos of facts and principles, confounding faith, provoking scepticism, or favoring belief in a multiplicity of gods, we behold the harmony of the universe, under the control of one Supreme Ruler.

The more minutely geologists have examined the arrangement and texture of the various strata on the earth's surface, the more complete has been the argument deduced from that structure, that this planet was *gradually* prepared, by an overruling Providence, for the abode of its present inhabitants.

The more thoroughly we understand the various revolutions in the individual and social condition of man, the more clearly shall we see that *thus* and *thus* has Divine Providence made known to man, that He rules in the earth, and overrules even

the wrath and wickedness of man, for the ultimate good of man.

These few facts thus imperfectly exposed, are thought sufficient to demonstrate the truth of the proposition with which we started—that mankind has a progressive advancement towards civilization, or a gradual progress in it; that in the present age, this progress is constantly accelerating; that in the Christian religion and Providence are to be found the primal causes of this progress.

But this law of progress is no self-executing law, nor is it arbitrarily imposed upon man by Providence—but is dependent for its realization in any given age or country, upon the voluntary action of the men of that age. It may be, apparently it has been, suspended, and even made to work with inverted action. No particular men, however gifted, are necessary to its development. The civilizations and dynasties of antiquity perished from inbred corruption—they could not enter into the fruition of human improvement, because they ceased to co-operate with Providence, and, being left to themselves, soon paralyzed, or, perverted into morbid action, the elements of improvement already developed.

Is there any such morbid action of the elements of civilization at the present age, and especially in our own country, that calls for any special qualifications in our teachers? Too palpably to be overlooked, there are. Let us briefly glance at a few symptoms of this disease.

1st. In Christendom generally, there has long been a diminishing regard for existing forms and teachers of religion, which, in some countries and at remarkable epochs, has produced a diseased action of the religious principle. Scepticism, infidelity, irreligion, have been the result. A fearfully large portion of Christendom are now in this diseased state. A strong symptom of the same disease is very prevalent in our country, and manifests itself in unwillingness to have religious instruction given in our schools. This never could be, where religious faith was in healthy action.

2dly. The influence of nominal Christians upon professors of other religions, by war, diplomacy and commerce, or rather, a large proportion of this influence, is at present, corrupting and demoralizing. Perhaps Providence may be opening an avenue for Christian principles, to the heathen, by the vices of Christians. So it has seemed to be, in signal instances in our own day.

3dly. The influence of professing Christians upon Christian communities, is of the same demoralizing character to a fearful extent, and from the same causes. Professing Christians adhere to the visible church for the sake of gaining honor, wealth—the means of corrupt influence. In our country, a large portion of the so called, visible church of Christ, tolerate, apologize for, and heartily engage in, a system of iniquity and oppression, altogether inconsistent with our professions of Christianity and republicanism. Too plainly to be overlooked, is there *here*, a fearfully morbid action of some element of human improvement. *What is it*, but that insatiate lust of wealth and power, which withered the glorious promise of Grecian civilization, which sapped and prostrated, never to rise again, Roman patriotism, as soon as it became the principle of action in Greece and Rome, thus perverting into the *ends* of individual and national action, the accumulated *means* of social improvement?

4thly. The hypocrisy and wickedness of those who have made the loudest professions of love for the political rights of men.

The rest of the civilized world declare, that of the two modern nations that have gone before all others in professions of love for equal rights, the republicans of *France* have exhibited the grossest *wickedness*, of any modern politicians—those of *America* the grossest *hypocrisy*.

Let us notice for a moment, some of the straws that show which way the popular air blows in our country.

How sacredly binding the provisions of the constitution are claimed to be, by some politicians, when those provisions are thought to support a favorite position, yet how that same constitution is scoffed at as a "*retorical flourish*," when its provisions are thought to oppose the wishes of those same politicians. See how provisions of the same constitution can be found to authorize *any* measure thought important to a party—how another party can argue any unpalatable measure to be unconstitutional.

5thly. The deference paid to what is called Public Opinion, is too often a sacrifice of religious principle, of political honesty, of individual, manly independence.

This is a very important topic, as a want of true independence is daily bringing public and private action under the control of expediency, rather than of principle; but I must pass to another, more german to our subject.

6thly. The great misapprehension, so prevalent, concerning

the nature of education, the proper means and directors of its progress.

Under this head, let us not attempt to look beyond our own country; we shall here find much more than can be considered in a single lecture, or alluded to under a division of a lecture.

But to particularize somewhat. Is it not painfully apparent, that education is, to a prevailing extent, by parents, and pupils, and teachers too, thought to consist in having a knowledge of the contents of certain books? As well might physical health be regarded as consisting in having in the stomach, the contents of certain cups and platters, albeit, they might contain the most healthful viands. Air, exercise, rest, the state of the system, the climate, season, &c. all are recognized as important in educating the body; but in educating the *mind*, for which the body is designed to be only the vehicle, the machine,—nothing more is required than to get *quantum sufficit* of book-food into the memory, the stomach of the mind.

Education is too generally thought to consist in the development of the *intellectual* powers, by those who look for something beyond a certain amount of knowledge.

Man has, to be sure, an intellect, a noble part of his nature; but it can only act *at all*, in this life, through and by the physical nature; it can act with safety to itself and society only when controlled by the moral and religious faculties; the *moral, intellectual, and physical, all together* being requisite to the well-being of man.

Again, in educating the physical nature, the *how*, the *when*, the mastication, the healthful digestion, are rightly deemed important; but in *mind-feeding* it is often regarded as the only important question to be settled, *how soon* can the education all be forced or coaxed in?

As the *how soon* is thought to depend much on the *how*, that must receive attention.

Some think that education must be beaten in, as colts are educated, but this theory is little in repute, being considered quite anti-republican.

Many follow the Homopathic plan, by administering infinitesimal doses of instruction, in sugared lozenges of pictured story. How would the body thrive on such light feeding?

Some think that education can be *talked* into the pupil, some would juggle it in, by cunningly devised apparatus. Others, afraid of *forcing* too much, would leave the affair wholly to the children.

Time would fail to mention the various mistaken plans, contrivances and opinions, concerning the true means of education. Perhaps the worst of all is the no plan, no opinion extensively prevalent. A faulty plan, an erroneous opinion, can be exposed and confuted, for then the mind *acts*; but when there is no plan or opinion, there is nothing on which argument can act.

In selecting the directors of education, the teachers, so called, great error exists. Too often those are employed who will work the cheapest. The laborers thus brought into the vineyard, are not so much to blame as those who employ them. They are sought for much as laborers are engaged for railroads and canals; those are preferred who will do the most work for the smallest pay and rations. Knowing the principle which has influenced their employers, it were unreasonable to expect them to be governed by higher motives.

This state of feeling and practice respecting schools, particularly our common schools, has resulted, in a great measure, from a mistaken attempt to have better schools. The common schools were found inadequate to supply the wants of a large portion of children, those whose parents had a desire and an ability to procure the best means of education for their children. The difficulty of persuading the school-district to employ a suitably qualified teacher, an unwillingness to procure for others, what they ought to get for themselves, has led the intelligent and wealthy parents to found academies and select schools for their children; and to leave the management of the common schools to those who had no plan or opinion about them, excepting that they should be maintained at the cheapest possible rate. I have said this was a *mistaken* attempt to have better schools. I would not say that there should be no such academies or high schools, affording the means of a more extended education than the children of the farmer and mechanic can find time to acquire. But until common schools are *raised to this standing*, it is every way bad republicanism, bad philanthropy, bad economy.

It is bad republicanism, for by making the education of the *wealthy*, better, and leaving the education of the *poorer* to become *worse*, two classes are formed, beginning life with very unsympathizing tastes and feelings. Bad republicanism is necessarily bad philanthropy, since the good of mankind plainly calls for true republicanism; the tendencies of the age are, to form plans of improvement as broad as the wants of man, comprehending the race. This is bad economy on the part of the

wealthy citizen, as the price of board and tuition for two or three children in a large town or village, would suffice to support a suitable teacher for the whole district or town, if added to the money raised by law for the support of schools; and, if cheerfully given for a few years, would be no longer necessary, as the community could not fail to appreciate the advantages they would find within their reach.

But not to cite so many symptoms of disease in the civilization of our age and country, as to lead to the conclusion the opposite of that with which we started; and as a palliation of those already mentioned, we would remark, That human society, and human life, are ever a mixture of good to enjoy, and to encourage us; and of evil, to be overcome and converted to good by human effort, aided by God, who ever helps those who help themselves.

Having glanced at some of the prominent encouraging and discouraging facts in the existing state of civilization, and of our own country in particular, let us consider, what qualifications are specially requisite in our teachers, that they may answer the claims thus made upon them, that they may most effectually coöperate with the circumstances that God, in his Providence, has brought into operation, and that are now developing for the improvement of man.

A practically Christian character, may be regarded as the first and highest requisite.

Pestalozzi, Neiff, Joseph Emerson, and all eminently useful teachers have, in a special manner taught and exerted their almost unbounded influence, by their Christian lives. Whoever has been blessed by the instructions of a sincerely Christian teacher, will remember some word, or look or action, that coming from the heart, has reached the heart, though, perhaps years and years after it had *seemingly*, passed forever from the memory. In an age when Christianity, manifested in the prevailing civilization, in the great tendencies of society, is becoming the foundation and key stone of the social edifice; when, too, whatever is alarming and of evil omen, springs from a want of Christian practice. Practical Christianity in teachers must be a primary requisite, for, as it is specially the office of the teacher to bring the minds of his pupils under the influence of the highest and noblest principles; as true education may be defined to be the development of all the faculties in harmony with, and under the guidance of the highest principles of our nature, which are all embodied in Christianity. One who does not feel and exem-

plify in his life the influence of Christian principles, is no suitable person to educate Christians. So, also, if this be a *practical* age, and Christianity its predominant characteristic, the practical man of this age, in the highest and truest sense, must be a practical Christian, one who labors together with Providence, in making practical to *universal* man, all knowledge, all truth. *What is so practical as Truth?*

To sustain and encourage the teacher in such a Christian course as is required in this seeming chaos of encouragement and doubt; of progress notwithstanding so much morbid action in the elements of improvement; of life, in death,—he has much need of FAITH—faith in the great law of individual and social progress. Regarding the character of the mind and of man, in this age, as the child of all which have preceded it, the teacher must also look upon the present as the parent of the future; and although, in its onward progress, civilization is daily gaining and stimulating into coöperative action, more and more individual minds; he must feel that the cause of human improvement requires the aid of the *whole human mind*, and that he must labor to enlist in this God-like work, all the intellect he can command or influence. This faith must be something more than cold assent. It must be bright, illuminating the path of toil, with a heavenly radiance; and warming into life, the whole soul and all its springs of action.

There is special need of such faith in teachers *now*, when faith in the improvability of man, seems yielding to faith in the perfectibility of machinery, and of contrivances for making money and of enjoying life, as it is called. These latter appliances seem all impelled by steam, instinct with life, like the wheels in the prophet's vision. The agencies for man's improvement need as potent propelling power, as diffusive vitality. Is not faith as wonder-working in mental action, as steam in physical?

In an age characterized beyond any other by the accumulation and general diffusion of knowledge, *knowledge* is essential to teachers; for how shall one teach what he knows not himself?

This, no one could controvert, we might suppose; yet it is controverted, and practically denied by a large portion of our own community, by school-book makers, and by teachers.

Do not the guardians of a school practically deny that teachers must *know* what they are to teach, when they employ those who have had no opportunity to know. Let us determine what

we mean by *knowing*, that our strictures may not be misunderstood.

To know is derived from the same root as *can*, and, in the Scotch dialect, is still spelled *ken*. To ken or know Latin or French, or English grammar or arithmetic, then, means, to *can* or be able to produce Latin or French thoughts expressed according to the principles of English grammar, computations and calculations illustrating the principles of arithmetic, even if they should not be in books that have been studied. Certainly, if knowing a thing involve, of necessity, the ability to make a practical application of its principles, to *can* it, many are employed as teachers, who know not what they are called upon to teach.

A large proportion of school-books are made expressly for the use of those who do not know and who will not learn, with question and answer so neatly fitted, that any one who can read, may use them according to the design of their authors, and as they too generally are used.

Teachers practically deny the importance of knowing what they teach, when they use such question and answer books, *merely as such*, when they use *any books*, as so much knowledge ready cut and dried for feeding out to their flock. The old swine-herd of whom we read, that he was employed in some German village, to teach the children, because he was no longer fit to look after the pigs, would do well enough in many a New-England school, if he could only read the keys and questions there employed to do all the head-work of teaching, and if he were enough of a disciplinarian to keep order.

It is important to remark, by the bye, that, important as it may be to have the *best books* in school, it is vastly more important that the teacher should so understand and illustrate what he teaches, as to make of any book a *help*, of no book an *implicit teacher*.

Again, teachers practically deny the importance of knowing what they teach, when they carry their investigation of a subject no farther than to ascertain that some book or some body says thus and so, though that *book* were the *Principia*, or *La Mécanique Céleste*; and that *man*, Sir Isaac Newton, or *La Place*. *My* knowledge of any subject has not become the power of producing it in practice, till I *know* it in *my own mind*, till I have brought it home to my own consciousness, and can perceive the foundation on which it rests, and its relation to other truth. When pupils are led to believe any thing, *because*

their teacher or their book says so, and all their *so called* knowledge is of this sort, (though it embrace the whole circle of the sciences,) they may be wonderful *parrots*, but they have not the education fit for intelligent souls.

EDUCATION ! That means *the drawing out* of the faculties, by subjecting them to the influence of *truth*,—not of *words*. Words may be the vehicle of truth, *but only to those who comprehend their meaning*. Words only, are air put in motion, or blots of ink. If words only are given to a pupil then, when he asks *bread*, does he receive a *stone* ? Such instruction, *as it is* called, is not merely *without benefit*, it positively does harm, for it discourages attempts to learn ; it abuses, as with mockery and insult, the desire of learning ; and unfits the mind for learning.

Time enough is spent in our schools,—there are enough of the means of knowledge in the reach of teachers, to send our youth from school, having their minds well indoctrinated with the principles and elements of knowledge, and an acquaintance with the proper means of making what may remain of life, a perpetual seminary for self-education. This *can be done here*, for it has been done, in parts of Germany, for more than half a century. It will be done here, when the community, and book-makers and teachers believe and practice upon the belief, that teachers should *know* what they attempt to teach.

The commencement of cure, is consciousness of disease. We have passed to the second step, the attempt to find a remedy. The Journal of Education, the American Institute, and many kindred associations throughout the land, the debates and laws of many of our State Legislatures, the voice of the press, and the efforts of many cities and towns, are evidence of the depth of our consciousness of ailment in our systems of education, and of the heartiness and success with which we have sought out a remedy.

Let us be thankful, and take courage ; let these symptoms of amendment strengthen our faith in the progress of society ; let teachers, in good earnest, devote themselves to bring about a complete reformation in education, which the wants of our age and country imperiously demand. "Whatever substantial improvements are made in education *must* originate with teachers," has been truly said by one of the most distinguished promoters of modern civilization.

To shew the necessity of a radical reformation in our systems of education, let us for moment enquire, *why it is*, that so large

a proportion of our distinguished influential men—have been what is called, self-educated?

In a great measure it may be attributed to this—that the self-taught man has not been fed on stones instead of bread, or stuffed with indigestible food, and thus been discouraged and misled in his pursuit of knowledge. The unschooled youth feels the influence of that general love of knowledge diffused throughout the community, which we have, in no small measure, inherited from our true-hearted ancestors—he hungers for knowledge; and He who hears the young ravens cry, has, in his Providence, caused the world to be full of books, and caused the community in which he lives, to be endowed with sterling common sense. Exerting his faculties as they may be educated, or drawn out, by *these true teachers*, he continually gains nourishment for his mind and keeps its digestive powers in healthy action. Yes, many who have been in school, have been educated in *spite* of their influence, rather than by that influence.

One other cause may contribute largely to the superiority of self-taught men. It is that they receive instruction of a very important character from *labor*. Labor is the divinely appointed teacher of man. "In the sweat of thy brow shalt thou eat bread," is, as man is now constituted, any thing but a denunciation of punishment. By labor we learn to *can*—to *know*, so that we are able to practise the laws of physics—the relation which our senses, our nerves and sinews bear to the material world. The constancy with which we feel the controlling superintendence of Providence, meeting us in all our encounters with his creation, teaches us to know Natural Theology, which now is *no misnomer*. The moral, the intellectual and physical natures are all together developed in harmony with the circumstances by which we are surrounded, and this is true education.

Would that our fathers and mothers *believed* this—then would they use the means within their reach of making their children *men and women*, to their own and their parents', this country's, and the world's well-being and rejoicing,—and then would cease to be produced, in our boasted republican land, (thrice happy did we know—*can* that true republicanism within our reach) then, would cease the propagation of that most anti-republican, unmanly and unwomanly class, called *Gentlemen* and *Ladies*.

Not that I would have less of schools, but more of work; but if children must have all school and no work, or all work and no school, I would choose the latter; better men and women would be trained up. They would not grow up in igno-

rance. The spirit of the age, the influence of our ancestors, the institutions of our country, (if they may at length be administered as they are interpreted,) the Sabbath, the newspaper, libraries,—these will educate the mind subject to their influence. Think you children will not read, if they are not sent to school? Few would forego that means, so easily acquired, of sweetening, and usefully directing, their daily toil.

The condition and character of Iceland is an illustration in point. They have no schools, but plenty of labor, to earn a living in their desolate and sterile country. And there is, probably, no community in the world, more robust, more intelligent and virtuous. May we yet see, in our own favored land, children taught useful industry at home, at least; and at school, be taught by those who have received a thorough education of all their faculties.

There are other considerations showing why teachers should *know* what they are to teach, that should not be omitted, notwithstanding the length to which this branch of our subject has been protracted.

One is, that the profession to which we have been accustomed to look for the inculcation of moral and religious principles, is, in our age and country, fast losing their influence in the community and especially over the young. I mean the clergy. I assume, here, that teachers are to teach morals and religion. If then, clerical influence be diminishing, and there exist causes that tend to diminish the restraining influence of religion, (which has been previously discussed) there is an increasing necessity that teachers should *know* the truths and principles of Religion and morals and practically exemplify their power,—this necessity is again enhanced by the indifference to this qualification of teachers, so prevalent in our community. This indifference proves the necessity of the right kind of qualifications in instructors as conclusively as any abstract reasoning.

Another reason for the importance of this qualification of knowledge of another sort, is the danger to which our institutions, our morals and our very existence are exposed by the immense, and unless the antidote of thorough and universal education be speedily applied, the alarming influx of uneducated foreigners, who too soon, are brought into the exercise of all the responsible privileges of citizenship. We need teachers sufficiently enlightened upon political rights, and obligations to train up the children at least of these hardy immigrants to become intelligent and useful citizens. Our own children too, are sadly

deficient in the knowledge necessary to constituent members of our vast democracy, and in the principles of social duties, still more deficient.

The ten thousand offices and perquisites, in the power of a dominant party to distribute amongst the people, the tendency of party dictation to control the prominent men in political parties, render early, thoroughly *inbred principle* and *manly independence* indispensable conservators of our political honesty.

Our national policy and legislation are dictated by the interests of a *peculiar institution*, which being based upon ignorance degrading one class, and selfish interest corrupting another, will ever press like a suffocating incubus upon our country, until the people shall possess enlightened knowledge of their true interests and become indoctrinated in sound political and moral principles, that know the quickening and sustaining influence of knowledge; by faith exemplified and in a holy practice.

For the dissemination of this knowledge, for the exemplification of these foundation principles in consistent practice, where shall we look with such hope of efficient aid as to the instructors of youth?

Amidst this indifference to thorough education, especially to religious instruction in schools,—the conflict of passion and interest with principle—of one interest with another—*true, consistent, enlightened independence of character in a teacher*, cannot be too highly prized, too sedulously sought for. He needs it to form and prosecute any plan of operations, any system of instruction suited to the peculiar character and circumstances of his pupils. He needs it, that he may labor for higher approbation than the applause of his patrons—that he may be raised above casual praise or censure and sustained in his deliberately formed purposes; that he may seek the praise of his own conscience, and of his God, rather than the praise of man.

Independence of character is the true nobility of our natures, and asserts its heaven-derived title to reverence and obedience, when preserved pure amidst the constant assaults of public opinion, religious and political party dictation, and the seductions of expediency, so alarmingly substituted in the place of principle, so shamelessly claiming its prerogatives.

That teachers may become and perform all that is demanded of them by the wants of society, they must have, as an indispensable qualification, AN ENTHUSIASM FOR THEIR PROFESSION. Instruction, then, must be a *profession*,—and may not continue to

be a *working as substitutes for teachers*,—no temporary employment, in order to procure the means of doing something ulterior.

No profession in our country, at present, possesses the power to do good, that might be exerted by teachers sustained by FAITH in the lofty destiny of man, guided by KNOWLEDGE, animated by ENTHUSIASM for their profession. They could lay hold on the infant energies and principles of the soul, and working *with Providence*, would like Providence, exert a controlling influence over the destinies of our country—of mankind. But like Providence, teachers or any human agency cannot improve the character of free agents, without their consent and co-operation. Let them labor to enlighten the community, concerning the true *nature and importance of EDUCATION*; the responsibility for the future character of the HUMAN RACE, under which God has been pleased to place us; concerning the qualifications requisite in teachers;—the sympathy, co-operation, and support needed by those who are called upon to lay the broad and deep foundations of social and individual progress.

THE GOOD OF MANKIND; THE PROGRESS OF CHRISTIAN CIVILIZATION; THE PECULIAR WANTS AND CONDITION OF OUR COUNTRY demand then of teachers,—that they be PRACTICALLY, IN LIFE AND DEED, CHRISTIANS; born above difficulties, toil, opposition and deferred success by a truly *missionary spirit*, by FAITH in the aid of God's Providence and in his designs to advance human improvement; that they should be guided by KNOWLEDGE that can realize itself in action; self-poised and sustained by manly independence; inspired by ENTHUSIASM FOR THEIR PROFESSION that never tires in devising and executing plans for the melioration of society and of man.

Such teachers would, by the aid of Providence, that ever aids those who rely upon it with the right spirit,—make our country a Christian Republic, foremost in activity and efficiency in advancing the dominion of Christian civilization over the WHOLE FAMILY OF MAN.

LECTURE VII.

ON THE

PROGRESS OF MORAL SCIENCE,

AND ITS

APPLICATION TO THE BUSINESS

OF

PRACTICAL LIFE.

By ALEXANDER H. EVERETT.

PROGRESS OF MODERN SCIENCE

APPLICATION TO THE BUSINESS

OF THE FUTURE

BY J. H. B. B. B. B.

PROGRESS OF MORAL SCIENCE.

GENTLEMEN,

THE place where we meet, and the purpose which calls us together, naturally direct our attention to subjects connected with the moral and intellectual culture of society. The period in which we live is one of great activity, and it might perhaps be difficult to decide in what department of action the effort at progress and improvement is most vigorous. On the one hand we are daily surprised and delighted with important discoveries in mechanical science and its application to the useful arts. On the other hand, the zeal for the diffusion of knowledge, for the advancement of moral and political philosophy, and for the practical application of their principles to the improvement of the existing forms of education, government and religion, is probably much greater than at any preceding period in the history of the world. Our own country, from its peculiar situation and circumstances, has become one of the principal theatres of both these movements, and one of the central points from which they are communicated to other less active and civilized regions.

The comparative importance of improvements in mechanical and moral science, has been sometimes made a question, and the answer to it a criterion for determining the pretensions of the present age, to the superiority which has been claimed for it in civilization over all that have preceded it. In the discussion of this subject, it has commonly been assumed that the tendency of the present time is on the whole, decidedly mechanical rather than moral; and this fact,—according to the different opinions of different judges,—has been regarded as the

glory and the shame of the existing generation. Some writers of distinguished ability,—among whom may be mentioned the eccentric, but powerful and eloquent Carlyle,—have deduced from it the conclusion, that society is in a state of dissolution, and that the only rational hope of any real improvement, is in a complete reconstruction, at some future indefinitely distant period, of the whole fabric of our political and social institutions. Other persons of high authority, proceeding on the same supposition, have regarded it as a reasonable ground of exultation, that the attention of the world has been diverted from idle disputes about mere words, to the improvement of the material comforts and enjoyments of life. Mr. Macauley, in his late able and eloquent dissertation on the character of Lord Bacon, in the *Edinburgh Review*, affirms with emphasis, that the labors of all the moral philosophers, from Socrates downwards for two thousand years in succession, had produced no result but empty words. It was the glory of Bacon,—according to this writer,—not, as has generally been supposed,—that he first recommended a new method in philosophy. The so-called inductive method had been always practised upon, and was, in fact, that of Aristotle, whom Bacon is supposed to have supplanted. The merit of Bacon lay in withdrawing philosophy from vain speculations, and giving her a new and nobler object,—*the material comforts of life*. The result has been seen in the warm and well-furnished dwellings, the cheap and good clothing, the abundant supply of provisions, the improved communications, and all the thousand and one articles of convenience and luxury which, in consequence of the recent improvements in mechanical science, are brought within the reach of almost every industrious person in the community. These, according to Macauley, are the real triumphs of modern philosophy, and of Bacon as its great founder and father.

I incline to doubt, Gentlemen, whether the illustrious philosopher in question would feel himself very much flattered by this account of his achievements. However highly he may have estimated the possession of the distinctions and luxuries of the world,—and I fear that he gave them far too much importance;—however frail he may have been in his practical conduct, and even in this respect, Macauley, I trust, has hardly done him justice,—his theories at least were too lofty to accommodate themselves to so very low a standard. In representing the labors of the moral philosophers for two thousand years in succession as resulting in nothing but empty words, this ingen-

ious writer seems to have had no distinct idea of the nature of the practical fruits which Moral Science is fitted to produce. Moral Science is, in other words, the theory of religion, government and the conduct of life : true religion ; good government ; good conduct, are its practical results. Had there been no such things as true religion, good government or good practical conduct, for the two thousand years preceding the time of Bacon ? How then can it be said with plausibility that during this long period the speculations of the philosophers had all terminated in mere words ? And, Gentlemen, are not the practical results of moral philosophy,—true religion, good government, good morals, at least as valuable as a somewhat greater polish, convenience or abundance of the material comforts of life ? The comparison of course would be ridiculous ; but we may even go farther and say with perfect truth, that the very power of making these improvements in mechanical science and its application to the useful arts, is itself only one of the results of improved Moral Science as exhibited in one of its most important practical consequences, a just and liberal constitution of government,—by which I mean a government that secures to the individual the fruits of his own labor. Give him such a government, and he finds no difficulty in obtaining the material enjoyments of life. The wilderness blossoms around him like the rose : he converts a sand-bank, an iceberg, into a garden of abundance, as we see in Holland—and our own Nantucket : without it he dies of hunger in the bosom of paradise. Art can do nothing for him until Moral Science has done her work and done it well. We look with justice to England as the workshop of Christendom,—in all that belongs to mechanical science and the material enjoyments of life,—the wonder of the world. Why is this, Gentlemen ? Is the air purer, the soil more productive than in the delightful regions of Spain, Italy and Turkey, where the arts languish and comfort is not even heard of excepting as an English word ? Are the men more finely organized than the countrymen of Cervantes, Dante, Virgil, Petrarch and Homer ? No, Gentlemen, but they possess, by the blessing of Providence, a government, which, with all its defects, is far more just and liberal than any other in Europe, and substantially secures the personal rights of individuals. Substitute the constitution of Turkey for that of England, and the mechanical arts would disappear from her soil one after another, until, in less than fifty years, she would find herself in this respect in the same state in which Constantinople and Cairo are

now. So it is with this country. The late foreign travellers, of all conditions,—Lord Durham,—Mrs. Jamieson,—have expressed their unmingled astonishment at the different aspects of the northern and southern shores of our great chain of inland seas. On one side, high civilization; intense activity;—a full enjoyment of the material comforts of life;—on the other, stagnation, ignorance, wretchedness. Yet the climates, the soils, the races that inhabit them, are all the same, and how slight the barrier that separates them! a lake, a narrow stream,—in some places an imaginary line. From your green mountain tops, you can almost see the lazy inhabitant of Canada pursuing his dull routine from century to century. “The contrast,” says Lord Durham, “is as extraordinary as it is inexplicable.” Alas, Gentlemen, there is nothing inexplicable about it, and Lord Durham should have known this, since he sees in his own country nearly the same activity which he had witnessed in this, and for a similar reason. Beside the imaginary line which separates the British colonies from this country, they are divided by the political barrier, in no way imaginary, which separates the jurisdiction of a good and a bad government; for the British government, comparatively good at home, is positively bad in the colonies. Break down this political obstacle, and improvement, in all its branches, mechanical, intellectual and moral, will overspread the Canadas with a flood as rapid and resistless as the torrent of Niagara.

The *moral culture* of society,—of which the last and highest practical result is a just and liberal constitution of government,—is, therefore, by far the most important object that can occupy the attention. Nor is it by any means true, as the writer to whom I have alluded appears to suppose, that it is the disposition of the present, or of any recent age, to overlook this object in comparison with others more immediately connected with the material comforts of life. It is the great distinction and glory of modern civilization, that it is, to use a German idiom, not *one-sided*, but *many-sided*; in other words, that all the various departments of science and action are explored with equal zeal and with an amount of labor proportionate to their relative importance. As Moral Science is by far the most important of them all, so it occupies by far the largest share of the public attention. Mechanical improvements, no doubt, arrest the eye of the mere practical observer with somewhat more force than those of a moral, political or religious character, and may naturally be supposed by him to indicate more distinctly the ten-

dencies of the age. They minister to our daily wants and pleasures, and thus acquire for the common mind an exaggerated importance. But a larger view, which looks beyond the events of daily life to the movements of communities, and the general causes by which they are determined, will find the whole history of modern Europe, especially for the last three or four centuries, little else but the record of a vigorous, persevering and almost universal effort, to promote the progress of Moral Science and apply its principles to practice in the improvement of existing institutions. The great revolutions of modern times are but so many steps in this progress; so many attempts, more or less successful, at a practical application of improvements, real or supposed, in the theory of Moral Science. The Reformation; the British Revolution; the creation of our own magnificent Republic; are the splendid results of the labors of the wise and good of other times in this vast field. The spirit which animated them still prevails among their successors, and constitutes the *spirit of the age*. The tendency of the present age is, therefore, essentially towards moral and not mechanical objects; but wherever moral improvement advances, the fine and useful arts follow in its train, and overspread the face of civilization with their miracles of usefulness and beauty. Poetry strings her lyre; Painting unrolls her blushing canvass; Architecture draws from the quarry her palaces and Parthenons; Navigation spreads her white wings to the wind; the railroad and steamboat annihilate distances; the printing-press scatters knowledge broadcast among the people. In the midst of this scene of enchantment, the common observer almost forgets that the whole grand and beautiful movement is determined and regulated by the great central spring of *moral science*.

Moral Science, Gentlemen, to borrow an illustration from oriental fable, is the wonderful lamp which enlightens the world; and the fine and useful arts are the beautiful spirits that appear at the call of its possessor and obey his bidding. When skillfully and negligently employed by an ignorant community, the talisman supplies them with nothing but the scantiest means of subsistence; but when genius has developed its secret powers, and a wise activity brought them into use, it lays all the realms of nature under contribution, and covers the country with abundance, beauty and happiness.

Moral Science, to borrow a still more agreeable illustration from an English source, is that mysterious genius described in

one of the poems of Mrs. Barbauld, who takes up his abode successively in various quarters of the globe, carrying with him, wherever he goes, the light of civilization, and consigning the realms which he abandons to barbarism and ruin.

" There walks a Genius o'er the peopled earth,
Secret his progress is,—unknown his birth ;
Moody and viewless as the changing wind,
No force arrests his step, no chains can bind ;
Where'er he turns, the human brute awakes,
And roused to better life, his sordid hut forsakes :
He thinks, he reasons, glows with purer fires,
Feels finer wants, and burns with new desires :
Obedient Nature follows where he leads ;
The steaming marsh is changed to fruitful meads ;
Then from its bed is drawn the ponderous ore,
Then Commerce pours her gifts on every shore.
Then kindles Fancy, then expands the heart,
Then blow the flowers of Genius and of Art :
Saints, heroes, sages, who the land adorn,
Seem rather to descend than to be born ;
While History, 'midst the rolls consigned to fame,
With pen of adamant incribes their name.
The Genius now forsakes the favored shore ;
And hates, capricious, what he loved before ;
Then empires fall to dust, then arts decay,
And wasted realms enfeebled despots sway ;
Even Nature's changed ; without his fostering smile
Ophir no gold, no plenty yields the Nile ;
The thirsty sand absorbs the useless rill,
And spotted plagues from putrid fens distil.
In desert solitudes then Tadmor sleeps,
Stern Marius, then, o'er fallen Carthage weeps ;
Then, with enthusiast love, the pilgrim roves,
To seek his footsteps in forsaken groves,
Explores the fractured arch, the ruined tower,
Those limbs, disjointed, of gigantic power ;
Still, at each step, he dreads the adder's sting,
The Arab's javelin, or the tiger's spring ;
With doubtful caution treads the echoing ground,
And asks where Troy or Babylon is found."

In selecting a topic for the present address, I have thought that a few remarks upon the progress of Moral Science, and its application to the improvement of social institutions during the last three or four centuries, might not be wholly uninteresting in themselves, or inappropriate to the occasion which calls us together. Our own country, as I have already intimated, has borne a large part in the promotion of this progress, and exhibits in her own condition and character, some of its most glorious results. Our institutions for education, and especially the colleges and universities are, or, if rightly managed would be, the central points from which the movement that determines

this progress proceeds. You also, Gentlemen, who as members of this Association, possess, in your united action, a powerful means of assisting this great movement, are imperiously called upon to do your share in carrying on the great work of improvement, and may not deem it wholly foreign to your present purpose to listen to such slight sketches as the brief limits allotted to me, and my feeble ability may permit me to give,—of what has been already done.

In looking back upon the history of Moral Science and its application to practical life for the last three or four centuries, the first great name that powerfully arrests our attention is that of BACON. It is somewhat remarkable, that one who has been recently, as I said before, brought forward with high commendation as the person who diverted philosophy from vain speculations on moral subjects, to the supply of the mere material wants of life, should, in fact, be the one whose comprehensive mind first surveyed the whole vast field of learning,—marked out the great divisions,—explored them all with equal success, and pointed out the new method by which the restoration of science, which he had planned, might be carried on and completed. Poetry, philosophy and history, were alike familiar to him. He combines in his writings the most profound, comprehensive and original thinking, with all the richness of language, brilliancy of illustration and warmth of feeling, that belong to the finest verse. The golden tissue of any one of his splendid essays, might be hammered out into volumes of ordinary poetry. His philosophy, far from sinking, as has been supposed, to the level of the kitchen and the store-room, embraces the loftiest problems of religion, morals and policy. "I would rather," says the illustrious Chancellor, "believe all the fables of the Talmud and the Alcoran, than that this universal frame is without a mind." Was this the remark of one who undervalued Moral Science, and thought no object of importance but mere material enjoyments? His method was that of Aristotle, like himself a universal genius reigning with supreme dominion over the whole vast domain of philosophy and poetry ;—original, bold, comprehensive, sublime, and withal keen, precise and penetrating ;—grasping at one time the structure of the most complicated systems of government, and at another, descending to the nicest *minutiæ* of a stanza or a syllogism. Plato, the master of Aristotle, had represented certain universal notions originally existing in the mind as the elements of knowledge. Aristotle rejected this idea, and appealed to observation as the only pos-

sible source of truth. This was also the theory of Bacon, who was the restorer, and not as has often been supposed, the conqueror of the mighty Stagyrte. The system over which Bacon triumphed, was a sort of chaos compounded by the monks of the middle ages out of the most heterogeneous materials, and having little or nothing of Aristotle about it but the name. Bacon, with the sympathy of a kindred spirit, divined the precious truth which lay concealed under this confused mass, and first revealed it to the scientific world where it has ever since prevailed without opposition. Alas! that the wisest and brightest should have also been the meanest of mankind! That this gifted spirit, so lofty in its soarings, so luminous and vast in its conceptions, should have been false to friendship, honor and virtue! How much happier was the fortune of his great prototype, who, unembarrassed by the cares of office and unseduced by its temptations, gave up his quiet hours to the culture of philosophy in the shady groves of the Lyceum, or in the exile to which he voluntarily sentenced himself in order to deliver the Athenians who were bent upon his ruin from the commission of a crime! Humanity weeps tears of blood over the tarnished glory of Bacon, but points to Aristotle as one of the brightest names on the list of her peaceful heroes.

The impulse given by Bacon to the progress of philosophy, in connexion with the movement of the age, put at no distant period a new aspect on Moral Science. The first great practical result of this improvement was the Reformation. This was something more than a mere word;—it was a deed of mighty import;—in fact a revolution. I say not this from disrespect for the Catholic religion: I admire and venerate that religion as the eldest, and for a long time the only existing form of Christianity. The church is the parent of our modern civilization. During the storms of the middle ages, she gathered under her white wings, dove-like, the struggling, bleeding, bewildered, half frantic nations of Europe and gave them peace. No finer spectacle than this is perhaps to be met with in the compass of history. What glorious monuments of art and genius attest the vigor of the living power that then animated this now decaying body! What a faith must that have been which inspired a Raphael and an Angelo, which erected St. Peter's, and taught its matchless vaults to echo with the divine *Miserere*! When in other countries I have trodden the long aisles of her Gothic cathedrals, with

"Storied windows richly dight,
Casting a dim religious light"

on the tombs and trophies of departed greatness, executed, perhaps, by the matchless chisel of Buonarotti or Canova; when I have heard on some solemn festival the full tide of music pealing from the deep-toned organ, and re-echoing in solemn strains from the lofty domes and sculptured chapels; when I have recollected how many of these beautiful edifices were reduced by the fury of the Reformers to ruins, I have been almost tempted to lament the whole movement as injurious to the best interests of the world. But this is, after all, a false and narrow view of this great subject; the Church had accomplished her mission. Errors had crept into her doctrine; abuses into her discipline. Above all, her forms, now rigid with age, cramped the movements of the living body. It was necessary that some bold, unflinching champion, should come forward in his might to shatter the cumbrous teneiment of clay that enveloped the spirit of our faith, and permit it to go forth freely in a dress better suited to its simpler genius and character. In the practical application of the improvement of Moral Science, the first object was to emancipate the mind from the trammels of authority, and the first step towards attaining this object, was to relieve it from the terrors of the supposed infallibility of any earthly tribunal.

The apostle of this great movement was LUTHER; a man fitted to the occasion and equal to it; one of the brightest apparitions that has risen in any age upon the moral world. In the retirement of his narrow cell in the little provincial city of Wittenberg, he sees and broods over the abuses of the times; but what can a single obscure monk effect against the combined powers of Church and State allied throughout Europe in defence of a system by which they hold their privileged existence? Worldly wisdom whispers to him in strains of syren sweetness to avoid the struggle:—

"Were it not better done, as others use,
To sport with Amaryllis in the shade,
Or with the tangles of Neera's hair?"

But the clear voice of duty replied from the secret chambers of his manly heart,—What should I fear? Saith not the Scriptures, if ye have faith ye shall remove mountains? In the fullness of his faith, and with no other aid to depend upon, the dauntless monk goes forth from his solitary cell to contend, single-handed, with the world. The opposition he meets with only irritates him and increases his power. He beards the

enemy in his strong holds and comes off conqueror. Powerful protectors rally to his assistance ; disciples gather round him ; he becomes himself a sort of moral potentate, and carries on the war on equal terms with the temporal and spiritual sovereigns of the age. Does the Pope excommunicate him ? The empty menace passes by him like the idle wind, or as the spear of Priam, in the Iliad, falls harmless at the feet of Achilles,—*telum imbelli sine ictu*. But the stern champion of reform launches in return a thunder-bolt of a very different texture, which makes the old Vatican rock to its foundations. Does the king of England undertake to overwhelm him by superior logic ? The vigorous opponent of Tetzels soon shows his Majesty that there is no royal road to success in argument, and that it is much easier for a king to decapitate half a dozen wives than to prove that two and two are not four. Even the Prince of Darkness himself, when he undertook to molest with his real or supposed presence the meditations of the mighty apostle in his retirement, at the castle of Wartbourg, found him rather an “ugly customer,” and carried off, if report say true, no very honorable trophies of the combat, in the contents of the Reformer’s ink-bottle. What inexhaustible fertility of resources ! Learning, eloquence, poetry ; all the gifts and graces seem to be at his service. He translates the whole Scriptures of the Old and New Testament ; a labor which in ancient times employed a Septuagint of Greeks, and in modern days, half a century of Englishmen. Our brave old German accomplishes the whole for his own share and in so masterly a way that his work fixes the standard of the language. The newly discovered machinery of the press groans under his pamphlets ; the mails overflow with his epistles ; his sacred songs are sung in every Protestant meeting and at every “cotters” Saturday night. At length he is invited to attend the Council of Trent with a safe conduct from the Emperor. This was the lure, which, at an earlier day, had marshalled John Huss and Jerome of Prague to the fiery stake. The friends implore him not to trust his person in the hands of his enemies. “I will go,” he replies, “although there were as many devils congregated to prevent me as there are tiles upon all the houses I shall pass upon the journey.” There, Gentlemen, spoke out the true spirit of reform ; there was manifested the faith that removes mountains ; the genius that unsettles empires and changes the aspect of the world. He went, Gentlemen, and his faith saved him. They did not venture to meddle with a hair of his head.

Such was the mighty Reformer. But all good and wise, and even great men, are not cast in this heroic mould. The divine spirit of Truth, which spoke from the lips of Luther in tones as loud and boisterous as the rushing whirlwind, was heard in murmurs as mild and musical on the western breeze, in the still small voice of his distinguished contemporary, Erasmus. Not less learned, eloquent and sagacious than Luther, endued perhaps with a finer taste in style, and equally averse from the errors and abuses of the age, his milder spirit shrunk from the roar of battle, and would rather have left matters to be set right by the slow process of the great reformer, Time. He would not willingly risk the ease and comfort of Erasmus, even to secure the salvation of the world. He was fearful that his good brother Martin was carrying things with too high a hand; brother Martin in turn is afraid that the good Erasmus in his zeal to please every body and offend nobody, is hardly sincere with any body. But it takes all kinds of characters to make up a world, and there is room in ours for Erasmus as well as for Luther and Calvin. Erasmus in his journies through Europe, asks for no safe conduct and fears no violence; he quietly takes his ease in his own inn, and on one of his expeditions amuses his leisure with composing what is now the best known and most popular of his works: his *Eulogy on Folly*. Graceful and elegant in his tastes, he is naturally attentive to the fairer sex, and has given us in one of his Latin letters, a most agreeable description of the ladies of England, which I am almost tempted to quote. Erasmus, however, with all his fine words, lives and dies a bachelor. Luther on the other hand, shows his devotion to the sex, in his rough but not less substantial way, by marrying a nun in defiance of the canons of the church. Such were the characters of these two distinguished scholars, the most eminent and justly so of their age. The impressions which they have respectively made upon the minds of succeeding generations, correspond with them. The works of Erasmus, classical, eloquent, replete with the finest pleasantry as they are, are consigned to the lumber room. His statue in the market place at Rotterdam,—fit temple for such a divinity,—is almost the only thing that recalls his name to the memory of the present generation. That of Luther blazes forth in letters of flame perhaps the most conspicuous in the rolls of modern history. It will gather new glory with the flight of ages. Such, Gentlemen, are the triumphs of the heart, for there, and there only, is the true source of the great and generous in thought and action. Erasmus had learning, wit, eloquence, but his views

and objects centered entirely in himself. He left the world no legacy but a few barren words which have long been forgotten. Luther with the same qualities, had the nobleness of heart which leads its possessor to risk every thing in the cause of truth ; to spend and be spent for the good of humanity ; to think nothing worthy of a moment's regard but the great concerns of religion and liberty. He had in short, Gentlemen, *the one thing needful* ; with that one thing he revolutionized Europe, and changed the aspect of the world.

So much, Gentlemen, for the first great step in the progress of Moral Science in modern times, and in its application to the concerns of practical life. The domain of thought was now delivered from the shackles of authority, and the mind at least, was permitted within the sphere of its activity to assert its natural claim to independence and liberty—opinion was free. It only remained in order to make the reform complete, to apply the same great principles to action, and secure them by the establishment of just and liberal political institutions. This has been the great effort of the last three centuries, and has been attended both in Europe and America with the most encouraging success. Our ancestors, the Puritans, commenced the work in England while the Reformation was still in progress, and carried it on simultaneously with that movement, until after various intermediate changes they brought it to its first result in the British Constitution. This was by far the greatest achievement which Moral Science had yet effected in the way of political institutions. Though now eclipsed by the superior excellence of our own form of government, it remained for a long time, the great exemplar of regulated liberty, and will always be an interesting object of attention for the student in philosophy. It secured to an extent before unknown, the personal rights of the individual citizen, and acknowledged him, at least for some purposes, as a component member of the body politic. But with these great truths it mingled grave errors. It regarded the rights of individuals not as the free gifts of nature and Providence, but as grants extorted from the fears, or bestowed by the favor of an earthly sovereign, to whom and not to the people, the British Constitution looked as the rightful and actual source of all legitimate power. The monarch was no longer the whole state : the people were permitted to share his power, but they held the portion which fell to them by concession and contract. The British Constitution was, in short, an intermediate step ; a transition from the pure doctrine of despotism, which regarded the monarch as every thing and the people

as nothing, to the more consistent views of our own institutions, which consider the community as possessing the right and power of governing itself, and the magistrate under whatever name or form, as the mere representative and agent of the people.

The theory of the British Constitution, as of all great improvements, whether in moral or physical science, followed the practice. It is, in general, not till a new idea has found its application and has been seen to operate, that it is traced through its various relations and presented as the basis of a system. The philosophers of this dispensation, were LOCKE and MONTESQUIEU; for a long time the two great lights in the political department of Moral Science.

Locke, Gentlemen, is the impersonation of pure intellect. He sees every thing within the scope of his vision with unrivalled distinctness, but he wants what I just now described as the *one thing needful*;—he wanted *heart*. Hence it is that his style of writing, though his subjects are all of the deepest and most absorbing interest, is totally devoid of attraction. Correct, manly, and not without some degree of vigor, it is cold and dreary almost beyond example. Not a ray of feeling pierces the long and dark night of those interminable volumes. Religion, government, morals, education, all the great ideas which have influenced the wisest and the best minds of every age to enthusiasm, for which nations have gone to the battle field and martyrs to the stake, pass before him like problems in geometry; he solves them to the extent of his ability with the passionless precision of a Euclid. Other writers, says a powerful though not very favorable critic upon Locke,—other writers, however unattractive, have at least some green and shady spots; but the works of Locke are one vast wilderness without a single oasis upon which the mind can repose for temporary refreshment. Unconscious of his own deficiencies, he treats as worthless the qualities which he does not possess. In his work on the understanding, enthusiasm in a good cause, the noblest exercise of our moral natures, is treated as a mere delusion: eloquence and poetry are represented as a sort of childish babble rather injurious than useful in the promotion of truth. This defect of manner would be of less importance, were it not that the same deficiency to which I have alluded, impaired the substantial correctness of his scientific views. The heart, Gentlemen, is not merely as Quintilian represents it, the only source of eloquence, it is also in Moral Science the great fountain of truth. The divine idea of *love*, which forms the basis of all our moral sentiments and duties, is a revelation from within.

"If ye love one another God dwelleth in you." He that does not feel the divinity stir within him, cannot know what it is and will probably deny its existence. Locke, accordingly, denies the reality of any original moral sentiments, and thus vitiates in its foundation, his whole theory of Moral Science. The same error is also fatal to his theory of government. The true basis of the social union is the natural affection existing originally among the members of the same families, and extending itself from one to another by new connexions, until it binds together by its golden chains the multifarious texture of society into one compact and homogeneous whole. How poor a substitute for this beautiful system, is that of an imaginary contract supposed to have been made between men in a state of individual independence, which, it is admitted could never have had a real existence! Such is the weakness of the leading positions of Locke. The insufficiency of his views for practical purposes, was curiously evinced by the utter failure of the Constitution which he framed for the State of South Carolina. How singular that this celebrated philosopher should have made shipwreck, where the yeomanry of our country with no other light but that of their own untutored good sense and good feeling, have so often succeeded. In refuting the still more untenable doctrines of his opponents, the supporters of arbitrary principles, he displays more ability, and sustains his reputation as a cool, clear-headed, methodical writer. Locke was the oracle of a transition party, a party whose existence represented the passage from despotism to a purely democratic system. Public opinion, even in his own country, and still more upon the continent of Europe, has long since left him far behind, and he now remains the "shadow of a great name," although few perhaps would be disposed, even now, to join in the somewhat too pointed remark of a recent French writer of great ability but strong prejudices, who declares that "contempt for Locke is the beginning of wisdom."

Montesquieu, the other great expounder of the British Constitution, is a writer of a different class. Brilliant, pointed, nervous, eloquent and profound, he unites the highest polish of style with a golden richness and solidity of matter. His only faults are a too great profusion of technical learning, which in some degree obstructs the free flow of his thoughts, and an excess of ingenuity which occasionally leads him astray from the plain truth of facts. This is particularly seen in his account of the British Constitution, which he seems to have regarded not as a transition system dictated by the force of circumstances, and destined to the early

dissolution which we now see in rapid progress, but as a finished work constructed on the soundest principles of art, and fitted for a long though not even in his opinion, perpetual existence. "All human things have their date," says the stern moralist. "England too will one day lose her liberty and perish; Rome, Sparta and Carthage have perished before her: she will perish when her Parliament shall become more corrupt than her king." Montesquieu, like Hume, seems to have anticipated a quiet passage at some distant period into absolute monarchy, as the probable *euthanasia* of the British Constitution. With all their sagacity, these great philosophers little dreamed that the elements of mighty revolutions were then ripening around them, which within fifty years would prostrate the antique monarchy of the Bourbons, and pour such a torrent of new life into the British Parliament, as would give to the government the essential character, and in the end probably the form of a Republic. Montesquieu's encomium on the British Constitution, won the hearts of the people of England, and he is almost the only great French writer to whom they have shown a disposition to do full justice. But though finely written and most ingeniously reasoned, it is not, after all, the best passage in his works. I admire him more when he traces back the origin of society to the bosom of the family. "A man," says he, "is born by the side of his father, and there he remains: this is society, and the origin of society." What compression, and at the same time what richness and justice of sentiment! I admire him again when he opens to us his long and brilliant portrait gallery of the heroes and sages of ancient Rome, a people whom he greatly admired. "I feel myself strong," was his remark, "when I can sustain my principles by the practice of the Romans." What a splendid and interesting spectacle rises before us in this rapid survey of the fortunes of the Eternal City! What solemn lessons burst upon the mind when we see in successive groups, the fathers with their stern and manly virtues watching over her cradle; the consummate statesmen, generals and orators, who cluster about her vigorous youth; the conquerors and demagogues that precipitated her fall and plunged her at length into the gulph of things that have been. But I admire Montesquieu most of all when he sketches with a few grand strokes, the characters of different forms of government; when he shows us despotism, monarchy, democracy, respectively sustain themselves by the influences of *terror*, *honor* and *virtue*. What a noble eulogium on republican government, in the mouth too of a subject of an absolute monarch, himself a

member of a privileged class ! What volumes of instruction are bound up in this brief oracle ! There, Gentlemen, you may read the secret of your country's prosperity ; there too, should her fortunes ever change, you will find the solution of her fall.

The British Revolution, gentlemen, although in itself, as I have remarked, an incomplete and unsatisfactory application of the improved theories of moral science, contained the germs of another, which was destined in the fullness of time to exhibit on our own continent a new application of the same principles in a much more perfect form. While the great body of the Puritans were engaged in a desperate struggle to carry out their views at home, a portion of them sought in the new-found world a wider and a clearer field of action. They launched forth boldly upon the then almost trackless ocean, and planted the standard of improvement and justice, on the shore of an unexplored continent. Unobstructed by adverse political elements ; having no obstacle to contend with but the untamed forest and its wild tenants,—they proceeded rapidly in their work, and in less than two centuries they gave to the world as its noble fruit the Institutions of the United States ; a system which, rejecting the false and retaining the true principles of the British Constitution, embodied for the first time, in something like a pure and perfect form, the great ideas of *Liberty, Equality, and the Sovereignty of the People*. These, gentlemen, are the last practical results of the modern improvements in the theory of moral science. Their value is attested by the whole history of our country. Their adoption as rules of conduct for a great community has by the admission of the ablest and most impartial judges in other countries "opened a new era in the annals of the world." With such a system in full operation before his eyes, it is wonderful indeed, that any competent judge should undertake to affirm that all the speculations in moral science for the last two thousand years had produced nothing better than empty words. The Reformation,—the British constitution, above all, the Institutions of the United States, are, if I mistake not, substantial realities. They are practical results of the cultivation and progress of moral science, in comparison with which the mechanical improvements of our own times, brilliant as they are, become insignificant ; without which, as I remarked at the outset, these same mechanical improvements could have had no existence.

The philosophers of this new era are yet to appear. Action, as I said before, is in all cases the precursor of systematic theory. They will be the product of the rising literature and science of

our country. But theirs was a gifted and glorious spirit who put on the garment of humanity two hundred years ago in the mother country, and who, though fallen on evil days,—“on evil days though fallen, and full of woe,”—may be regarded as the Prophet and the Poet of our brighter dispensation. I mean the minstrel of *Paradise Lost*. The noble ideas of truth, justice, liberty and religion, which found so imperfect an expression in the ephemeral Commonwealth of England, and are now so much better developed and exemplified in our own republic, were exhibited in all their purity, and with a splendor of eloquence and poetry never equalled before or since, in the writings of Milton. How delightful, Gentleman, to turn back the view from the mingled and doubtful character of many of the modern expositions of moral truth, to the works of this great man. To him the friends of improvement and liberty may well look with pride as the apostle of their faith. In him it is associated, as it is meet and fit that it should be, with the loftiest powers of thought, fancy and expression;—the noblest enthusiasm for religion and virtue, and a blameless purity of practical life. Methinks I see him in his calm and studious youth,—a faultless model of moral, intellectual and corporal beauty. Early ripe and wise, but not premature in urging himself upon the notice of the world. By a long course of meditation and reading he collects his stores of knowledge and prepares his powers for action. When the time for production arrives, what brilliant gems of poetry indicate the richness of the treasures that are to follow! With what felicity of language and imagery he plays with the various aspects of nature, in the charming companion pictures, the *Allegro* and *Penseroso*! What loftiness and purity of thought ennoble the beautiful imagery of the *Comus*! Never before had the English ear listened to a strain so high in thought, and at the same time so exquisitely finished in style. He now visits foreign countries and augments his stores of learning and wisdom, from the pure wells of French and Italian literature. Already he meditates a great national poem, and in the beautiful Latin verses which he addressed to the Marquis of Manso, he expresses the hope that he may live to celebrate the exploits of King Arthur and the Knights of the Round Table. Fortunate minstrel! a subject far loftier than this awaits your labors, and will call forth strains from your lyre, in comparison with which the happiest metrical version of the fable of Arthur would have been but a nursery tale! He now returns to England, but not to indulge himself in the enjoyment of literary leisure. The accomplished scholar, the divine poet, is also the

good citizen—the political philosopher, the dauntless patriot. The rights of the people are in question;—he asserts and maintains his place among the foremost of the friends of liberty. He defends the freedom of the press, in a tract unsurpassed for logic and eloquence, which still remains, after all the discussions of the last half century, the best work that has ever been written on the subject. He had conceived the idea of a Christian Commonwealth, of which he sketches a most graphic and spirit stirring image intended for the England of his own day, but which applies far better and with great exactness to the America of ours. His trumpet voice rises clear and full above the din of battle, not to congratulate the conqueror on his victory, but to exhort him to re-collect the things that make for peace. Hear him addressing the Lord General Cromwell.

"Cromwell, our chief of men, who through a cloud,
Not of war only, but detractions rude,
Guided by faith and matchless fortitude,
To peace and truth thy glorious way hast ploughed;—
And on the necks of crowned fortune proud
Hast reared God's trophies, and his work pursued,
While Darwin stream with blood of Scots imbued,
And Dunbar field resounds thy praises loud,
And Worcester's laureat wreath. Yet much remains
To conquer still; peace hath her victories
No less renowned than war."

In the midst of these labors his sight fails him. Does he yield to despondency, and rest from his arduous toils? Hear him once more in his splendid and pathetic appeal to his friend Cyriac Skinner; a sonnet which is enough, of itself, to immortalize his memory.

"Cyriac, these three years' day these eyes, tho' clear,
To outward view, of blemish or of spot,
Bereft of light their seeing have forgot,
Nor to their idle orbs doth sight appear
Of sun, or moon, or star throughout the year,
Or man, or woman. Yet I argue not
Against Heaven's hand or will, nor bate a jot
Of heart or hope; but still bear up and steer
Right onward. What supports me, dost thou ask?
The conscience, friend, to have lost them overplied
In liberty's defence, my noble task,
Of which all Europe rings from side to side."

Elevated by his talents and character to the highest employments in the Commonwealth, he acquires himself with great distinction of his task, until the tumults of the times finally compel

him to retire from the public service. Are not all these labors and achievements enough to satisfy the most rigid notions of honor and duty? May not the few remaining years of this agitated and glorious life be devoted to repose? Oh no, Gentlemen—at this very moment he commences the great, the real labor of his life; the work which is to found his reputation and give him an earthly immortality. How grand and solemn the invocation at the opening! Need I say, Gentlemen, how graciously this solemn invocation was heard and answered? Well might the poet, with the consciousness of powers like those which are shown in the *Paradise Lost*, anticipate in a passage of his earlier works that his face would one day be designed in marble and his hair entwined with laurel. Such was his destiny.—I have seen his bust myself in Westminster Abby preeminent among the monuments of the greatest and best of his countrymen, crowned with laurel, and bearing on its pedestal as an inscription the beautiful Latin verses to which I have just alluded.

“My features, too,” if I may venture to give the sense in a simple prose translation, “perhaps, the sculptor may one day design in marble, entwining the hair with a garland of myrtle or of laurel, but I shall be reposing at the time in careless peace.” When I saw this, Gentlemen, I could not but feel how vain are all the triumphs of mere material power—how utterly impotent the efforts of malignity to crush the really great and good. The last days of Milton were obscure. To the corrupt but brilliant court of Charles II, he appeared like a defeated, disappointed and broken down man. His sublime poem was sold for ten pounds, and fell still-born from the press. He is spoken of by his contemporary the Ambassador Whitlocke, as *one* John Milton. Alas, Gentlemen, two centuries have wonderfully changed the relative positions of all these parties. Charles II. with his whole troop of minions and mistresses, the base pensioners of a foreign despot is a bye word of infamy: Milton is recognized as one of the greatest ornaments of his country—of humanity. His poem is proclaimed the master piece of the art: and the unlucky remark to which I have alluded is the only thing that redeems from entire oblivion, and covers with no very enviable distinction the name of Whitlocke.

Such, Gentleman, was the character of the great English apostle of our republican faith;—a worthy subject for the contemplation and imitation of the high minded youth of all countries and especially of ours, where his golden dreams of liberty and virtue, —too beautiful for the age and nation of his birth—were destined to be first realized. I recommend him to you as an almost fault-

less model from which you may learn to love liberty without indulging in licentiousness ; to study and practise the arts and graces of social life, without forgetting the active duties of the patriot citizen, and to sanctify all your acts, words and writings, with the pure and sublime spirit of religion.

I have thus, Gentlemen, attempted with the brevity required by the occasion, to illustrate some of the principal steps in the progress of Moral Science, and its application to the business of practical life. I have endeavored to show you that the labors of the wise and good men who have gone before us in this great field, have not been without effect : that they have produced something better than empty words. But although much has been done, much still remains to be effected. Our country seems to be marked out by Providence as the theatre upon which improvement is to be carried to the greatest possible extent, and social institutions brought to the highest degree of perfection which our imperfect nature will admit. Without cherishing extravagant notions of the probable future attainments of society, we may yet well suppose that much which we now see to be of evil tendency in our institutions and habits may be amended ; much that we believe to be useful introduced. In the political institutions of the country, few if any important alterations are perhaps to be desired. But the effect of the best political institutions is chiefly negative. Their virtue consists in permitting the individual to enjoy unimpaired the fruits of his labor, and to develop unmolested his capacities for good. In effecting these objects, society comes again to his aid, with other institutions, which are also other applications of the highest truths in Moral Science. Schools, academies, colleges, churches and associations, under whatever name or character, for the promotion of literary and scientific, benevolent, moral and religious objects, constitute the machinery by which our community has reached its present state of advancement, and which must be chiefly relied upon in future, to carry forward the great work of the moral culture and improvement of society.

What gratitude do we not owe to our noble ancestors, the Pilgrim Fathers of New England, for the zeal, fidelity and discretion, with which they provided in this respect for the wants of this and all future time. The immediate object of most other new settlements even on our own continent, has been the acquisition of gain, too often without much regard to the means by which it is acquired. Our forefathers came to this country which they regarded and described as the outside of the world : they

left their delightful abodes in the bosom of civilization, and exiled themselves to a then, inhospitable and desolate wilderness, mainly that they might obtain the full enjoyment of civil and religious liberty. The great ideas of religion and liberty were to them the only things worthy of a moment's thought or attention. No sooner were their first physical necessities provided for, than the moral culture of society became their chief and paramount object. Schools and churches were established in every village, but these alone were not considered sufficient. It was necessary to provide a class of institutions for the purpose of training those who are to dispense elementary instruction to the people, to discharge the duties of professional life, to extend the bounds of art and science. Such institutions are coeval with the settlement of the oldest New England colony, and have followed with equal steps the progress of population in every part of our country, until their number is greater in proportion to our population than in any other country on the globe.

Apprehensions have sometimes been expressed, that such institutions would have a tendency adverse in practice to the popular genius of our government; but the rapidity with which they have spread themselves over every part of our territory, proves satisfactorily that this idea finds no countenance among the body of the people. It is in fact directly the reverse of the truth. The object of our popular institutions is to distribute the elements of power with a perfectly impartial hand among the people, and to entrust the functions of government to those who are best qualified by character and talents to fill them, without regard to the artificial distinctions of birth and fortune which exercise so much influence in most other countries. But this beautiful system is a mere mockery, unless the community, while it grants to all its members an equality of rights and political privileges, also provides them with the means of acquiring that knowledge which is the substantial element of power, and which alone can render this equality real and essential. While the schools and churches supply the people with the instruction necessary to enable them to discharge with honor the ordinary social duties, there must be another class of institutions where the poorest citizen may have access to the culture which shall fit him for professional and political pursuits; which may give him in after life the distinctions, wealth and influence, that belong to the literary professions; which may enable him to appear with advantage in the halls of legislation, on the bench of justice, or in the executive magistracies of the state and general government. Such is the office of

our colleges, which I therefore look upon as decidedly the most democratic feature in the whole compass of our social institutions. They form the golden chain which connects the least favored portion of the community with the highest professional and political distinctions, from which they would otherwise be separated by a gulph entirely impassable. Now and then an individual of extraordinary endowments,—a Franklin, a Bowditch,—rises with but little aid from education to the loftiest heights of science or action. But these are exceptions, and laws and institutions must be calculated not for exceptions, but for cases of ordinary occurrence. In general, the individual can only develop his capacities to the extent of his culture, and the true method of equalizing the advantages of the members of a community, is to equalize as nearly as possible the means of intellectual, moral and physical improvement which are placed at their disposal.

On us of the present generation, has devolved in the course of nature, the task of maintaining these noble institutions, which have been handed down to us by our forefathers, and transmitting them in turn unimpaired to our posterity. How arduous the duty! How vast the responsibility! How rich the reward of conscientious exertion in so great a cause, afforded by the consciousness of laboring at least with sincerest effort, whatever the result may be, for the good of the community.

You, Gentlemen, as members of the American Institute of Instruction, have devoted yourselves more particularly to the improvement of the common schools, the great distinction and glory of New England. Persevere, I pray you, with undiminished zeal in this noble employment, so creditable to yourselves, and so important to the people. Let the constantly increasing public favor which seems to attend your labors, encourage you if possible, to still augmented exertion. The signs of the times are certainly auspicious. The establishment of Boards of Education in our own and in some of the neighboring States,—the success with which these objects have been prosecuted, and in some instances carried into effect ;—the annually increasing attendance at these anniversaries ;—finally the cheering scenes which we have witnessed in this place during the last week ;—these vast assemblies, called together from considerable distances, at a point remote from the great centres of population, by no other motive than a deep interest in the cause of education ;—all these and a variety of other not less animating symptoms of public opinion, evince that the mind of the people is awakening to a full sense of the importance of this great subject. But though much has been

effected, much still remains to be done. In proportion to the extent of the harvest, the laborers are still comparatively few. Go forward then, Gentlemen, with renewed spirit on your honorable course, and be assured, that though some other departments of labor may appear to a superficial view more important, there is none in which you can work with a more complete certainty of effecting, so far as your ability may reach,—unmingled good. With the best wishes for your success, and with many thanks for your kind attention to these desultory suggestions, permit me now to bid you farewell.

LECTURE VIII.

ON THE

COMPARATIVE RESULTS

OF

EDUCATION.

By THOMAS P. RODMAN.

LECTURES

ON THE HISTORY OF

EDUCATION

IN THE UNITED STATES

COMPARATIVE RESULTS OF EDUCATION.

Two principles divide educators into two great classes. One of these principles is, that the acquisition of knowledge is a task which youth must perform. The other is, that the acquisition of knowledge is perpetual pastime, in which youth may delight. There are educators who are not to be included in these classes, since they are as far removed from the severity of the one as from the indulgence of the other; as little disposed to tyranny as to license. The principle that governs and guides these may be thus expressed. The acquisition of knowledge is labor, lightened, indeed, by the consciousness of increasing vigor, and cheered by the enjoyment of rich rewards, but still, labor, and not pastime, albeit, delightful labor. It is labor, too, not imposed as a task, but done with a willing mind—labor, the free exercise of healthy intellectual habits. A comparison of these classes with each other, and with the eclectic brotherhood standing between them, has suggested the thoughts which I am now to communicate.

The first of these principles was, to some extent, prevalent among the ancients, and it has had long and wide sway among the moderns. The Roman boy, smearing his eyes with oil that he might seem blind and avoid his lessons, and the more adroitly deceitful English boy, showing up his exercises done for him by a classmate, or by a fag-master of the upper form, are sufficient examples of its beautiful operation upon the moral nature of boyhood in all ages of the world; and the manifestations of its power in the intellectual character of those who have been trained in accordance with its promptings, have been scarcely less demonstrative of its happy effects. Of the ancients, we know only

that their great ones were few, though the class that could enter the most direct path to eminence, a scholastic education, was large. Some influence neither magisterial nor pedagogical must have awakened the purpose and imparted the power which made them what they were. The multitudes that crowd the ranks of the *οι πολλοι* in the Universities of England, and the few who bear away the honors of the theatre, show that some impulse unknown to the public schools has urged on the great ones of that great realm in their glorious career. In spite of their training have they advanced to their honored stations. In spite of its clipped wings and hoodwinked eyes have been the soarings of genius to its pride of place. Though, in our own land and time, no one principle has prevailed so far as to characterize the educational influences operating upon youth, yet, perhaps, the history of education among us would show that task-work, with its accompaniments, rewards and penalties, has been too highly prized, and that emulation has been too much encouraged. Emulation, too, has appeared in its worst aspect. It has not been as Eurystheus inciting to unequalled toils, but like some master of contracts, for whom men perform stipulated labors, thinking only how they may surpass competitors, not how incomparably well they can do. A medal or a premium has been the goal of boyish effort. The scholar has bent himself with all his might to the completion of some specific work. His school has been in high repute for some peculiar excellence. The best readers or declaimers, the most expert arithmeticians, or the acutest grammarians may have distinguished it for years; or the teacher to whose keeping it has been for a time confided, may have been a hobby rider. His favorite study may have been elevated in the estimation of his pupils, until in gazing upon it, they have overlooked every thing else. Such are some of the causes which have brought into action the principle that learning is, emphatically, a task. The operation of these has been felt mostly in our schools, but not only in these humbler seminaries have they wrought. The college, as well as the school, has exemplified the principle which I am now endeavoring to examine. A youth has resolved upon professional life. The college nearest to his home, or the one where he can most conveniently support himself during the years of scholastic discipline, has been adopted as his Alma Mater. He has gone thither, and hurried as he might through the prescribed curriculum, thinking of nothing but getting through, and having thus got through college, he in like manner gets through a professional school. Were a young

mechanic or tradesman to prepare himself for his business in such a stinted manner, he would inevitably fail of emolument; and, indeed, the professional man, save in some cases of accidental success, fails of emolument, as he always does of reputation, if his preparatory training has been of this superficial character. The ranks of all professions furnish examples of such men. The question, how much is required for advancement to such and such a stage, was upon their lips and in their minds through all their course of pupilage. My father says I may be excused from geometry, says the boy, he intends I shall be a shop-keeper. And in the self-same spirit, the student of this class neglects many subjects to which a generous love of knowledge would lead him, not in that laudable spirit of self-denial which prompts men to relinquish some studies that they may be perfect in others which duty commends to their attention, but in that spirit which neglects or distrustfully regards all that is not requisite to the attainment of a certain position. Somewhat in this spirit was the advice which I once heard given to a student of theology. You must have an academic diploma, said the clergyman to the young candidate for orders—you must have a diploma, but it matters not where you get it—only you must get it before you can be admitted at the Divinity School. No thought was given to the benefit to be derived from a good college, none to the evil which a bad one might do, but the diploma was the needful thing. Such students when arrived at that stage in their studies which entitles them to practise a profession, amidst perpetual inefficiency and ever occurring defeat, wonder why they are not appreciated,—calling to mind, perhaps the minute accuracy with which they complied with every requisition of their directors in study, and longing for tasks and rewards again, conscious of unfitness for independent labor. True, this spirit may meet no fostering influence in the higher seminaries,—true, the men of freer minds at these institutions, carry off the formal honors conferred by them, and they bear with them, too, the sense of being truly honored by their guardians and by their companions, but still men of this class exist, and that too in large masses. The question is, how came their minds to be thus contracted. Surely they never felt the true love of learning. They never could have earnestly inquired about the things which they have seemed to study. They have never looked at the universe as full of the wonderful and the knowable with that noble curiosity which inspires the purpose to make the knowable known, and to exchange the wonder of ignorance for the more exquisite wonder

of knowledge. Still less could they have regarded knowledge as the great instrument of human advancement; the scholar's wealth, enriching him to minister to the wants of human minds; the power enabling man every where to obey the command of God, to subdue the earth, and to have dominion over it. What can we conceive more meagre than a mind of this class? And who made it so? Had it not the elements common to other minds? Was not its lot the common lot? Looked it not out upon sky and earth, sun and stars, sea and forest, in a word, upon nature and upon itself? And was it questionless in the midst of these teachers of truth? How came it dwarfed and blinded? Who wrought this deformity? Lead me to the first teacher of that mind, and I will tell him of the wrong, and when he asks who committed it, I will say to him, Thou art the man.

This is one of the most ordinary results of such task-work. This is one of the results of education in our own land and time. The influence of which I speak has prevailed, and its results are seen. The influence yet works, and its results multiply. Yet it has not prevailed so far as to characterize education among us, nor need we apprehend its extended sway. Other influences have been at work and are still working. But if it work at all, we ought to be active in counteracting its effects. We ought to do our utmost to paralyze it utterly. Its immediate effect upon the scholar is to make him feel that study is merely a formal thing. He learns simply that he may recite. He recites, that commendation, honor, reward, may be bestowed upon him. He does not learn because he has a desire to know, and recite to assure himself that he does know. He does not truly labor. He does not work as *he* works, who feels that labor is a good, being invigorated by exercise and sustained by the fruits of his toil. He does not feel that for the soul to be without knowledge is not good, and, therefore, toils in the true spirit of toil. He is a slave, though his fetters be of gold, and their clanking sounds in his ears like the music of renown. Thus passes he the whole of life. As a boy, he knows not the exquisite delight of ever-wakening curiosity. As a man, he is unvisited by philosophy. He plods his weary way through task after task, and knows none of the rewards of mental toil save the emoluments of his station,—enjoyments which he might reap as well from the drudgery of office, or from the labor of the factory or the shop.

I have spoken of the professional student. Let me suppose one destined to some one of the many employments that busy men. What is the result of such education in his case? Train-

ed in the discipline of tasks, he feels, on leaving the school-room for the last time, as if his last intellectual work were done. The real use of books, he knows not. Of pursuing, undirected, a course of study, he has no idea. He is utterly unfit for self-culture. Some new light must be poured in upon his soul, or he shall, from that day forward, go on as if he had no soul. And so many have been thus educated, and are as yet unilluminated, that we need conjure up no chimera to give us an example of the result of this kind of education in the world of busy men. Step into yonder workshop. The labors of the day are nearly done. Wait a moment and you shall see the men at leisure. They are not the sons of poverty. To eat,—to sleep,—to work,—do not take up all their time. No penurious master lords it over them. Their apprenticeship is long past. And perhaps they never knew the slavery of abused apprenticeship; for times are changed since the days of our fathers, and it is only here and there one master who regards his apprentices as machines, and grudges every moment of time not spent in toil for him. Perhaps these young men might have availed themselves, if they would, of some Mechanic's Institute, with its library and lectures, but they did not, because they went to school, when they were boys, to a teacher, who, whatever else he may have taught, did not teach them how to study; and since they have left him, they have met with no kind hand to lead them to the places of improvement, to awaken in them that self-moving power, that purpose of advancement, without which all the aids to advancement are but as nought,—without which libraries are no more to a man than lumber-rooms, and the exhibitions of the lecturer no more than the show of the juggler. They came out blind from the school-room, and no eye-salve has yet been provided for them. Behold them now in their homes. Listen to their table-talk. Lights up any eye with intelligence? Beams over any face the glow of sentiment? See you there the cast of manly thought? What do you hear? Is the conversation of useful or delightful themes? Bears it testimony to the self-culture of the interlocutors? Is it of science or of art that they speak? Does literature grace the hour of sociality? Or is it dignified by upward glancing "thoughts that wander through eternity," guided by the load-star of everlasting truth? Talk they in any sense like rational, thoughtful, immortal, human creatures? Their language is the cabalistic dialect of folly. It seems almost, as we listen, that they who in boyhood had been taught nothing but words, and whose intellect was never trained to free labor, but

was always in bondage to the task-master, had resolved to avenge the wrong done them, by murdering language. These are the men who look back upon school-boy days as the wasted days of their lives. They deem the labors of the school-room to have been vain and profitless. They were indeed to them. But the worst of all is that they have become sceptical of all education. They think that boys *must waste* time in school. These are they who think that a practical education means just so much knowledge as will enable a boy to keep account of his gains. And often they think that he can acquire this knowledge best in a shop, or in some petty pedlary of his own. You may see the children of such men early incarcerated behind a counter or turned loose upon the street, learning the mystery of money-making,—their most classic dream the nursery tale of Whittington and his Cat,—their sublimest aspirings, the fortunes of Girard. They forget, alas, that the poor boy who learned early from stern necessity, to turn a penny in the streets of Philadelphia, devoted, when he became a man, a portion of his princely wealth to the very purpose of saving boys from such early initiation into the mysteries of trade. They think but of his gold,—its uses they forget. What in him we might pity and commend, in them we must scorn and condemn. We found these men in a workshop. Go to the resorts of such as congregate from stores, and warehouses, from counting-houses and banks,—the busy in more genteel employments, as we call them. See you greater elevation of mind,—any better results of education? Or, turning from the haunts of men, penetrate the veil that divides home from the world. Are the mothers and sisters better educated? I will not weary you with the details of ignorance, as it appears here. Tell me, if you can, why, when George asks his mother to write for him an excuse for absence from school or for tardiness in attendance there, she hesitates, and, perhaps, refuses;—or why, if she writes one, is it so awkwardly expressed, and so miserably misspelled? Why, when Frederick or Jane asks assistance in learning a lesson, does that mother turn the child away, with the remark that she has no time for such things? Or why does that sister, peevishly or jocosely, as it may be, wonder why they should ask assistance,—why not get the lesson and say it,—that is the way she did when she was a child at school. Explanations! indeed,—why, child, you must say every word of it,—that is all,—there,—trouble me no more about helping you get a lesson. Or can you tell me why in some families the writing of a letter is regarded as an onerous

task? Why is a distance of one or two hundred miles, or even less, an effectual barrier to communion between the members of a separated family? Yes,—you can answer all these questions if you know what sort of schools the mothers and elder sisters went to in their childhood.

I have spoken of the undistinguished collegian, the insufficient professional man, the empty minded tradesmen and clerks, and the ignorant family, as among the results of the task-work system of education. I believe that they are. I know that a well trained teacher, knowing enough to lead his pupils in a wide compass of knowledge, may so arrange tasks, that, in the end a good education will be obtained; but, even then the pupil would be more happily and more profitably employed, if trained to habits of labor for himself. But, in general, they who act upon this principle, whatever may be their own acquirements, know not how to teach others to acquire and use learning. "John, come and recite," says such a teacher. John comes. He begins and soon stumbles. Not dreaming of working for himself on the subject of the lesson, he has literally been getting the lesson. The stumbling is the signal for the teacher to send him back to his seat. The boy does not think of working out for himself the knowledge of a subject, but of getting his appointed task. That it is valuable to him he cannot perceive. But true labor brings with it its own reward, and its consciousness of worth. But of what labor is I will say more presently. All these of whom I have been speaking, at college, in professional life and in the world, found themselves unfit for self-direction in study. Thus it is that they came to a stand in learning. Had they been used to work in the field of knowledge, they would not have been as we have seen them. But the field of knowledge in its magnificence of extent and luxuriance of product, they never surveyed. They dived in little circumscribed plots, and felt not that they were working for themselves but for their masters. And this feeling always accompanies task-work; and it is destructive of all purpose of self-improvement. It seems indeed to destroy selfhood itself, and to make a man feel as if he were not his own but another's. This feeling must be eradicated before he can take a step in true intellectual advancement. As long as this feeling prevails, the mind forms no large purpose. It regards study as a daily form. It goes through with that form, and every day is a separate portion of time, to that mind, complete in itself, having its own little cycles and standing alone. The past is as nothing—the future is as nothing. This appears in the boy,

when, having done tasks for a week, you question him about his studies. He can give you no satisfactory answer. You may see this when you hear scholars say as they are endeavoring to apologize for some deficiency—I cannot tell that—I learned that a good while ago. This to a stranger in the school-room, or to a good teacher who is not accustomed to receive scholars from other schools, may seem mere imagination. But it is fact. It is almost impossible for one unaccustomed to observe educational matters, to conceive the utter failure of much that is called teaching. Pupils know almost nothing,—they have studied almost every thing,—that is, they have got lessons with all sorts of names. They may have worked hard under most rigid task-masters. They may have done all that was required of them, but they have gained nothing by this toil. The truth is, they have not had the purpose to know formed in their minds. They have not really labored. For labor is work with a purpose, not slavish toil at another's bidding. These results will be found to exist in almost every instance where the educator insists upon task-work. He who toils at a task looks forward to its completion. He cannot conceive of continual action, of true, generous labor. Herein appears the mistake of those who contend that the acquisition of knowledge should be regarded as a task, which youth must perform. They intend that the habit of study shall be formed by inuring the young to exertion, presenting no encouraging motive, save this, and this only, the realization in future life, of some benefit, which at present is not definitely imagined. But what can such a motive do for any mind? Some good must be realized in action as well as hoped for as the consequence of action. Hope itself cannot live upon promise. Some earnest of good is essential to its life. The merchant hopes for abundant wealth as the reward of long devotion to business; but does he wait weary years for returns from his first adventure? Does the farmer gather no fruit till the autumn? Or, to rise at once to the highest example of effort sustained by hope, has the Christian no joy till the portals of the heavenly city open to receive him? The law of labor is, that enjoyment shall spring up in its path as well as embower its resting place. But there is no joy in task-work. He who is confined to it looks ever beyond his hours of toil for enjoyment. A glimpse of the truth has been caught by the taskers, and so they give rewards to their toiling students. But not seeing it fully they mistake the great principle of education. They do not believe that youth can comprehend the idea of a labor in learning commencing in childhood

and filling all life with a purpose worthy of a being introduced to a universe full of incitements to intellectual and moral exertion. And, faithless in this ground-truth in the doctrine of the real educator, they fail of success in setting the mind freely at work. During the period of youth, they think, learning *must* be a task. And the great weary task is portioned into little tasks to make it tolerable. And when youth is past, the freedom which is offered is a gift that cannot be enjoyed; for the mind has become dependent. It is like the emancipated Hebrew, who, during his septenniad of bondage, having forgotten his destiny, laid his ear to the door-post and became a slave again. In vain do we look for self-directing power in such a mind. It may have been drilled to some intellectual evolutions if we may call them so. It may go through with some of the merely mechanical operations of thought, but the effort to acquire, it will not put forth. They who in youth were thus trained, and who have since become true laborers, have looked on lights which in youth they never saw. They have since been taught that much that they once learned, was but the means of learning. Had they been taught this at the time of making their early acquisitions, in what a different spirit would they have made them! But such teaching as this is not accordant with the spirit of tasking. Indeed, on the tasking system, the teacher has little to do but to appoint the work. Any intimation of its design, any assistance in the performance, are foreign to the purpose of the tasker. But enough has been said to exhibit the system and its results. With one word of explanation we will leave it to consider the second principle. Let it not be supposed that in condemning tasks, I object to a specific employment for every day, and even to a course of studies appropriate to the season of life. I object to a principle which I am sure has prevailed to a lamentable degree, which, in its operation, makes students forget that knowledge is valuable for itself. It makes them study, not to know, but that others may be satisfied with their attainments. This is its worst result;—this is the grand objection to it;—this should condemn it to utter banishment from all the retreats of learning.

Looking at the operation and the results of this principle, another class of teachers have, in endeavoring to avoid evil, erred as widely as the first. Disgusted with the severe and uninteresting toils to which children have been sometimes devoted, they have thought that learning should be pastime. The school-master with them is literally *Ludimagister*. Amusement is the object of every exercise. To interest his pupils means, with

him, to secure their attention for an hour. He may intend more than this, but more than this he does not accomplish. Every sign of weariness, every expression of unconcern, is a signal to him for ceasing from effort to advance them in any particular direction. The task-master thought it enough to point out the way and goad them on in it. The amuser lets them wander where they will, follows, or, rather accompanies them, and ministers to their refreshment when they are weary. He worships childhood. Its smile makes all light. Its sadness darkens the universe. Its reveries are the meditations of the profoundest. Its prattle is the revelation of wisdom. Of such it may be truly said, in the words of holy writ,—“My people are fools and children rule over them.” It is no matter of wonder that this should be. The young teacher, remembering the slavery of his days of pupilage, remembering the utter contempt of childhood which was manifested in every word, and tone, and look and gesture of the schoolmaster, sometimes showing itself in an overbearing sternness, and again in an overweening fondness—both the moods of the tyrant,—always showing itself too, in the capricious discipline and in the dictatorial instruction—resolves to be the opposite to such a teacher as he feared and hated, and tremblingly obeyed or despairingly resisted. He would not be the tyrant of childhood; so he becomes its vassal. He would not lead it blindfold; so he lets it wander purposeless. He would not weary it with profitless tasks; so he indulges it in busy idleness. He does all this, and expects that the innate thirst for knowledge shall lead it to the fountains of truth. It shall make instinctive efforts to be good and wise. Now this is **wrong**, as the results plainly show. Let a teacher, weary of controlling the waywardness of youth, sometimes yield to it. There is no need of his visiting the school-room of a teacher who deems learning pastime. Let him, among his own pupils, make an experiment for himself. Does he see the strong bent of genius manifesting itself? Does he see any indication of decided purpose? Remember, his school-room is not full of prodigies—it is the resort of children—bright, active-minded, amiable children, I will suppose—but not prodigies. There are no Wests there, but many a tolerable penciller, who, well trained, as every boy should be, will be a good draftsman by and by. There are no Scotts, but many a story-teller, who, habituated as he ought to be, by careful direction to observe circumstances and occurrences, and to relate them too, shall be a delightful letter-writer when abroad, and a good member of the fireside convention at

home. But all these, if left to the capricious suggestions of their own minds, rather, I should say, to the waywardness of their wills, shall be nothing but idlers and gossips. There are some youths in the community, who, busy in various avocations, make literature and science their pastime. They dip into history and poetry. They are charmed with the truth-telling exactness of mathematical demonstration. The beautiful laws of chemistry are unfolded, or they read upon tables of stone the teachings of geology. They become rapt star-gazers next, and then weary of the "golden lamps" of heaven, they are dazzled by the brilliant displays of the electrician. They skim the field of knowledge like butterflies, and as each attractive subject falls under their notice, falls I may well say—for they never purposely bring any thing before them, they become fascinated with each and with all. They master nothing. As these youths out of school, so will be the youths in school, if left to amuse themselves with learning. I feel that I ought in passing to say, that in this description of a class of youth every where to be found in cities and large towns and populous villages, I do not include those really studious youth, who, from a thousand scenes of toil, retire when the work-day is done, to solitude or well assorted company and books, to prosecute the deliberate purpose of self-culture. Our country's history is made glorious by the story of many such as these. Her future history shall record the fortunes of thousands more. It is enough for me to say that I mean not such as these. But can the formation of such characters as I do mean, commend a principle to educators? But it is plausibly contended in behalf of this principle, that they who have become eminent, have chosen their own path. This fact is acknowledged, but that it commends this principle, is denied. Work with a purpose and delight in labor, are far different things from purposeless occupation and pleasure-seeking activity. The former are characteristics of genius, the latter may accompany much versatility of mind, much action, but little power, and are indicative of any thing but genius. Genius may exist in a mind that is passing through a state marked by these latter characteristics, nay, these characteristics may be seen in many of its habitual moods, appearing at intervals through life; but these are not the proofs of genius. These things it has in common with the mass, but these are not marks of distinction. Now the end at which the amusing educator aims, is professedly the development of genius. He would put no fetters upon the free soul. He would have genius spread its wings and soar away,

and he would stand and gaze upon its flight. But this glorious bird must be nestled before it can fly. There is a passage in D'Israeli's *Essay on the Literary Character*, which in this connexion, may direct our meditations for a moment. Having traced the striking resemblance in character and habits between men of genius in different ages of the world, he says,—“A father spirit has many sons, and the several great revolutions in the history of man have been opened by such, and carried on by that secret creation of minds, visibly operating upon human affairs. In the history of human affairs, he takes an imperfect view, who is confined to contemporary knowledge, as well as he who stops short with the ancients, and has not advanced with their descendants. Those who do not carry their researches through the genealogical lines of genius, will mutilate their minds and want the perfect strength of an entire man. Such are the great lights of the world by whom the torch of knowledge has been successively seized and transmitted from one to the other. This is that noble image borrowed from a Grecian game, which Plato has applied to the rapid generations of men, to mark how the continuity of human affairs is maintained from age to age. The torch of genius is perpetually transferred from hand to hand amidst this fleeting scene.” The instances of resemblance pointed out in the passage of Corneille to the elder dramatists of France—of Pope to Dryden—of Buffon to the naturalists of the old world—of Moliere and Foote to Aristophanes—of Bayle to Plutarch—of John Huss to Wickliffe, and of Luther to John Huss,—do not merely tell us that in different periods of the world's history, men have arisen who have found in their predecessors the sparklings of a fire like that which animated their own souls, and have thus accidentally perceived their affinity to greatness; but they tell us that characters in more recent time have been formed by contemplating those which have distinguished remoter ages. It is true that in every age there have been men eminent among their contemporaries, whose natural traits have been like those of some illustrious predecessor. So marked has been the resemblance sometimes, that men have wondered at it; and have surmised wondrous things too—have talked of pre-existence and transmigration, and indulged in vagaries without number; but generally, when such resemblance has been observed, it has been found to be the result of voluntary affiliation. The aspiring mind has said to some mighty one of old, my father, be thou the guide of my youth! He has pondered his history, he has contemplated

his deeds, he has become like him in mind, and in purpose, and in action. Thus prophets and bards have sounded the voice of warning, or the spirit wakening song, age after age; the philosopher has bent his searching gaze upon the sources of knowledge opening in the path of life, as the light of successive generations has fallen upon it; a host of witnesses to truth have marched down from earliest time, and knowledge and virtue have held their places in the earth. It is not enough that we gaze admiringly upon this noble army, but we should inquire where in its ranks is our place; with what labors we shall employ our time, what achievements shall be ours. And, in the determination of these questions, we must be directed by the promptings of our own minds. And the mind will give no counsel until it has first made trial of the matter by experiment. It must have proved its powers before it will say in what direction they shall be constantly exerted. It must have sojourned in many regions before it can say where its home shall be. It must mingle in the crowd to find its friends. It must learn many things before it can begin itself to add to the treasures of knowledge. It must commune with the past, before it can be conjectured what influence it can exert upon the future. It must sow beside all waters, before it can know where to cast the precious seed with assurance of abundant harvest. The mind must be educated before its leading powers can be discerned. It must be in pupilage before it can teach. It must be open to all genial influences. It must search the picture gallery of biography till it finds its prototype, and then it may add to the honors of its intellectual ancestry, by following in the path of renown which its fathers trod. All this supposes a "vast and vagrant curiosity," a love of intellectual labor, the true *φιλονομία*—a real student-like spirit and purpose, cherished amidst all discouragements, and reminding the man even in the labyrinth of daily cares, of his rank in being and of his destiny. Taking this view of the subject, how interesting, how beautiful is life! We may regard ourselves during the progress of early education, as on a journey to take possession of our patrimonial estates. We know that when we find them we shall be in possession of all that we want. All our hopes shall be realized, when we set foot upon those domains which are reserved for us. We pass through fair fields, but they are not ours, but we must needs pass through them, because they lie in the way to our destined place. But we gather riches as we go, and we live luxuriously, though we are only way-farers. The regions through which we pass are

not desolated, they are the homes of those who have been as we are, travellers. They impart to us of their stores. We receive with gratitude and joy their munificence. It is prized, and loved and treasured up. But we are not satisfied until we know ourselves at home. We are amassing stores of learning, but we have not arrived at the fields where we are to be reapers and garnerers and givers of largess,—but we shall arrive there if we diligently go on, and turn not aside in despair, nor neglect the improvement of the way-side gifts that we receive of things essential to our efficient progress. We must take this view of life if we answer the purpose of its Giver concerning us. We must believe that in a sphere greater or less, we are destined to form characters, not only to be the heirs of some father spirit, but to be ourselves progenitors, and the treasurers of wealth for others; to add to the influences which go to make up some class of minds. If we do not believe this, if we are reckless in our course, we may waste our lives in endless wanderings, our purposeless efforts giving us no good, qualifying us to impart no good. This is no dream of fancy, but a picture of life. Every noble effort wakes up an approving voice in the past and in the future too. Conscience is made peaceful by the one, and hope is delighted by the other. We feel that we have done what our fathers loved, and we believe that posterity will not be ashamed of us. And with respect to unworthy action and to indolence, the reverse is true. In all this I would say, if my meaning is not already apparent, that we should look diligently at the past, that we should acquire the elements of all useful knowledge, contemplate all greatness, and determine to what walks of science we will especially devote ourselves, what moral enterprizes we will undertake, what examples we will follow; not servile copyists, but acting out ourselves, and glorying in the greatness of those who have lived before us in the same sphere of action. We may be sure that if we do not prepare ourselves for action, we shall not be called to act. Indolence will disqualify us for any place in the ranks of the good and great. And what is purposeless activity—perpetual pastime—but indolence?

The systematic culture of our minds is the preparation for taking possession of our patrimonial estates in the intellectual and moral world. If we neglect this preparation, we shall be disinherited. We are called to a life of labor,—to do all the good we can,—to be busy in those things especially, for which we are best qualified. We are to seek our true places and to

fill them well. Genius may work as mightily and as effectually in the school-room or at the fire-side, or wherever there is a human soul to be influenced by its workings, as on the heights of fame in the eye of the world. The mighty past and the eternal future may be visioned as distinctly in the midst of humble scenes, as in the midst of all that shines with worldly glory. And it is this vision of the universe, and the knowledge of one's own place in it, that evokes, animates, actuates and sanctifies, and beatifies, and immortalizes genius. If this theory of the "generation of character" be true, we are furnished with a guide to our true places. We know that as our characters are developed under wise culture, we shall perceive to what order we belong, and then we have only to act as circumstances direct in that order. All this requires diligence, thoughtfulness, love of truth, love of goodness. The means to be used, having formed the resolutions which these dispositions prompt us to form, are the acquisition and the use of knowledge. Using these, we shall arrive at our true places and do our duty in them. In no other way can we find them. We may fill a place with applause and society may call it ours,—but if it be not, our souls will feel it, and we shall grieve without sympathy. What but this bitter consciousness of misdirected powers awoke those wailing strains of woe that sadden so many of the songs of the great poet, who made his grave amid the "Isles of Greece." What but the feeling that he had irretrievably erred from the lofty and bright way in which he should have gone upward and onward, turned him from the contemplation of truth and nature, to the miserable vision of factitious life? So must it be with all who desecrate or neglect their powers. They must become the prey of nameless sorrow, of unsympathized, if not of uncompassionated grief. And if no purpose of good actuate us in all we do, we may be assured that we have not found our true places, that we are desecrating or neglecting God's gifts to us. Moved by the impulses of which I have spoken, a man may rise to as high an eminence in literary reputation as if he were absorbed in selfish ambition, a prey to morbid emotion, or addicted to trifling pleasures, in a word, a seeker of amusement,—of pastime,—of self-gratification. As high—he will rise immeasurably higher than the purposeless man. He will be a laborer, conscious that all he does is for the good of the human race; and his ambition will be chastened by the conviction, that the fame he hopes for, rests upon the benefits that he confers. And thus

will he win the highest fame. The amuser can only be admired. In the honor which such a laborer evokes, the voice of the heart speaks out in its most earnest tones and tells of the love of humanity for the lofty and the good in man. Is such a man a searcher into the secrets of nature? He is the more diligent and patient the more prominent he becomes in his philosophic character. Is he a moralist? He feels that no refinement of speculation, no nicety of casuistry, no parade of eloquence and erudition, can make up for the want of practicability and truth. Is he a poet? He feels his priesthood to be a holy one. He knows that to amuse, to please, to excite, are not all that he must do in his office. It is his to praise God in his holy temple. Every song of tenderness,—every trumpet-note to a brave man's memory, calling up the brave spirit in other men, be it to battle with physical or moral force,—every thing that tells of nature and of breathing life,—every gush of melody from his harp and voice, must be attuned to the choral harmonies of purity and truth that rise from the universe to its Author. Nothing low, mean, sensual, soul-perverting, can he breathe out into the ear of listening humanity. All these,—the philosophers and the poets who sing the world-wonders that the philosophers explore,—feel when they are moved by right impulses, that they are the heirs of the venerable and the beloved, that theirs is the wealth of a world's heart-honor, and heaven-approved approbation, and that men in after time shall look back to them as the fathers of their characters. To do good by our characters! How blessed is it! What a motive to action! What a spur to industry! What an awakener to the soul, dreaming in some hour of weakness, of inglorious rest, or of undirected action! This is the motive that prompts the efforts of the true man of genius. This is the hope that sustains, cheers, inspirits, impels him. This links him with man in brotherhood, and crushes selfishness with its brood of ills.

Is genius thus to be developed, cherished, matured? Its manifestations, then, are not to be looked for in a career of amusement. It is in the midst of labor that its light will appear. We may not expect to see it in its sportive hours, till we have borne it company in its toils. The grand motive, then, of the amuser is taken away. He cannot, by his method, develop genius. And surely all know that in the attainment of useful knowledge, nothing but a serious purpose of improvement will avail the student. Such a purpose may be formed in very early life. Even young children can be led to form it. Adapt

their studies, or rather, I should say, your teachings to their capacities ; present to their minds the appropriate subjects ; busy them in the attainment of arts and accomplishments suited to their years, and you will need no illusory power to wile them into knowledge. They may learn, and know that they are learning. They may be intent upon their work, and be conscious of effort to fix their minds,—effort to overcome reluctance ; and they will persevere in it too. You may, in a word, inspire them with the love of labor.

In thus dwelling upon these principles, am I battling a man of straw ? Do I imagine evil where there is none ? Do you tell me that all that is meant by making learning pastime, is that children should be led to love study ? I answer, "hold fast the form of sound words," and say just what you mean. There are young teachers,—I have seen them,—who have caught the idea that learning must be pastime,—that we must rely upon the spontaneous workings of the young mind ;—and unless they can constantly interest, that is, amuse their pupils, they are in despair. You shall hear it said of some one who has addressed a group of children, "Ah ! he was so interesting !" And you shall question the children so interested, and they cannot tell you what he said, or of what he spoke. It shall be said of a school,— "Oh the children are so happy there !" And you shall find that the happy children know no more than the vexed and fretted children of the task-master. Better,—a thousand times better is it,—that they should waste their time happily than miserably, if it *must* be wasted. But must it be wasted ? Cannot a child even be made to love improvement and to labor for it with a full purpose ? If ever a man lived who could make learning delightful, that man was Roger Ascham. And if ever man inspired his pupils with the love of labor, it was he. There was no child's play about study where he was. It is true that he was not much in the school-room, but his guide to the teacher might well be carried to the school-room. His "Scholemaster" is professedly, a guide to the Latin Tongue, but it is in reality, a discourse on the philosophy and practice of the art of teaching. The grand principle that it sets forth, is, that in all teaching, you should impress the learner's mind with the idea of something beyond what you communicate. He should feel that he is to advance. You may not lead him in a circle. Now you may carry this principle down to the infant school. Lead the child's mind step by step over creation. Begin with his own frame, and go from himself to all around him

and above him, and make his questions come quick as the sparkles of his eyes; and answer them as quickly as you may; if you will. But it is better if you tell him but a little, and assure him that if he will learn to read he may find all out for himself. Will the labor be dull with such a motive? You have awakened the desire to know,—now exercise the power to learn. Do it seriously. Let him feel it is labor. It is not pastime. Play in the hours of play. Play with all your might. The schoolmaster must, indeed, be Ludimagister. In the play-ground children need a teacher most. But in the time for study, banish the thought of play. There may be intense delight then, but it must be the fruit of the truest toil. It must be the delight of mastery,—of acquisition,—the consciousness of advancement by effort.

We are brought then to the third principle which we stated in the beginning. But is the love of labor spontaneous? Will it always put forth its energies? Will the teacher who adopts it never have any difficulties to encounter? And when difficulties arise, how is he to meet them? When difficulties arise from the various faults of scholars, the faults must have appropriate correction? It seems to me that all faults should be resolved into one, viz. neglect of duty. When this appears, let the teacher take an early opportunity of showing that all neglect occasions loss. Let it appear that this loss is incurred without the agency of the teacher,—that it is as natural and inevitable as that of a farmer would be, who should be idle in spring time. One instance may suffice for illustration here. The exercise in Composition appointed to a class in school was a description of a country, embracing every particular within the compass of their studies. There were some failures. These were expected. And it appeared to the delinquents that their deficiency was the result of negligence. Thus without any specific charge, and, of course, without any formal punishment, pain enough was felt to arouse a right purpose. I question whether, had study been deemed pastime, the delinquent pupils would have felt much regret. Would they not have felt that if they failed in the game of Geography, they might excel in some other of the school games. But feeling as they did, that they were deficient in an important matter, they formed a right purpose. This is one of a thousand instances within the range of a teacher's observation. A teacher of the right spirit may show his pupils in their hours of recreation, even, how much loss is incurred by neglect of duty. That

play of the mind which is the best recreation, is diminished in vigor and variety in proportion to the intensity of study in the season of study.

But, perhaps, a more important question relates to the awakening of this principle of the love of labor in the minds of the children. Is it spontaneous? Experience shows that it must be awakened by direct and continual influences of the most elevated kind. The spontaneous impulses of childhood are fitful and wayward. Life governed by principle is the result of training. In this remark, I have anticipated the question, how far the power of the will may be trusted in the formation of character. The true office of the will is to act out the character, not to be in continual conflict with the character. The child is not habituated to the love of learning who has to make new resolves every day against feelings contrary to that love. He must be led in the right path till he wills to walk in no other. His will can only persevere in action. Emotions and habits of feeling,—tempers,—are the result of action and thought, and of influences from without. And all good influences are to be sought from heaven. We may prate of the freedom of the will and of its omnipotence as much as we may, facts show that its freedom is circumscribed; and as to its omnipotence, all that is boasted of it is mere boasting. It can do nothing to produce a change of feeling, but just to call into action the powers that can produce it. It cannot be urged too soon upon a youthful mind, that its character depends upon its habits, and that the power of the will is limited to the choice of these. Thus encourage its efforts at self-direction, thus too, induce it to accept the aid in this great work which teachers and educators must be prepared to impart. Thus save it from that worse than Danaic toil, the labor of resolving and re-resolving.

An elevated state of moral feeling must exist where reliance is placed upon the love of labor. And, indeed, without this, vain is our reliance upon any principle. To secure this is a teacher's highest duty. When the pupils feel that the limit of attainment is opportunity and that alone; when they feel that the Author of the universe has made the knowledge of his works and ways the duty and delight of his creatures; and that this knowledge includes all that is wonderful in nature and in human affairs,—with what intenseness will the love of intellectual labor glow in their souls! And when this love comes as

an influence from heaven, the teacher has nothing more to do than just to aid the efforts that it prompts. The tyranny of task-work had been unknown, the thought of studying for amusement would never have beclouded a human mind, had this religious love of intellectual labor been from the beginning the object of the teacher's prayers.

LECTURE IX.

ON

PHYSICAL EDUCATION.

By ABEL L. PEIRSON, M. D.

The following performance was written several years since, for an association of teachers, and its publication declined by me on account of its imperfections. I have followed the poet's advice and kept it seven years, and it has grown no better! But in the mean time, the lapse of years has diminished my sensitiveness to criticism, and as some experience has shown me that medical opinions on subjects connected with Physical Education, have an official weight independent of the personal importance of their promulgator, I have yielded the manuscript to a renewed application to publish it. Some of the remarks are those which occurred to me in the course of miscellaneous reading, and I would honestly affix a mark to the property of others to distinguish it from my own, if my memory retained any clue to guide me in doing it. Nevertheless, I hold this to be not of the slightest importance, for I am of opinion that it is just as honest to steal the language, as the ideas of others, as the canny broom-maker preferred purloining the brooms ready made, to plundering the stock of which to make them.

A. L. P.

PHYSICAL EDUCATION.

SOLOMON, who is high authority among schoolmasters, but whose memory is not over fondly cherished by transgressing school-boys, has directed us to bring up a child in the way he should go, and this maxim has met with universal assent. The meaning however, of this plain direction, has received a variety of constructions. The mathematician believes it means the way in which a child should *cipher*, and the classical scholar the way in which he should *translate*, while the professor of calisthenics interprets it to mean the way in which he should dance, and make his bow, and turn out his toes. But the man of wisdom had no such narrow views, and by "the way in which he should go," he doubtless meant that his education should include all those particulars which are calculated to train all his faculties, both of mind and body, to their most effectual exercise during his *transition* through his present state of existence, to the high destiny to which his Maker has invited him. The greatest earthly mystery, is the union of an intellectual spirit with a corporeal body, and in complying, my friends, with your request to provide a lecture on, "the connection of the Physical and intellectual well being of Pupils in Schools," I shall offer you but a humble and imperfect contribution towards promoting the objects of your very praiseworthy institution. You must be aware that if I were to attempt to satisfy your minds upon such a theme as the one you have proposed for my discussion, I must expend much time and labor in preparation, and go back to those fountains of learning from which the active business of life causes us widely to stray, and for the want of whose refreshing influences our minds for the most part, become arid and

an!

barren of all literary product. In fact, I hope I shall not *appear* to be as much out of place as I *feel*, since it would much better comport with the literary deficiencies of men who lead a life of active labor and exertion to take the lowest form in such an audience as this, rather than the teacher's desk. Thus much allow me to have said in no affected modesty, and as anticipating the incompleteness of the discussion into which I shall lead you. My object will be rather to excite your inquiry than to gratify it; and my end will be obtained if my remarks induce you to read and to think.

It is well for us to consider what manner of beings we are, and in this the very threshold of our subject, we are prone to overlook one of the soundest and most valuable of physiological truths. Man sways the sceptre of the animal kingdom, and he is accustomed to consider himself as entitled to this distinction by reason of his superior animal organization. Whereas he is in reality the weakest, the most defenceless, and at his birth he is, so to speak, the most imperfect of all the inhabitants, with which creative wisdom has covered this globe. And paradoxical as it may seem, it is owing to this imperfection, this weakness, this want of defence, that he owes his superiority and his elevated rank, the blessings of the social state, and the almost indefinite enlargement and improvement of his intellectual faculties; to this cause he is indebted for that ray of heavenly illumination, in virtue of which he takes a rank but little lower than divine.

How many of the animal kingdom surpass him in the acuteness of the senses! He cannot, like many birds and quadrupeds see in the dark. And in the brightest noon-day, his glance cannot, like the piercing gaze of the eagle, penetrate an immense region of atmosphere. The hare, the mole, the bat, have more sensitive organs of hearing, and singing birds have more facility in distinguishing intonations of sound. In the perception of odours, man's inferiority is most manifest. The greyhound conducts him to his game, by his unerring scent—the despised swine distinguishes the odour of his truffle and pignuts through a foot of solid earth, and the voracious vulture scents the tainted gale from Egypt to Pharsalia. In his sense of touch how does he fall below the zoophytes and mollusca, even the very earth-worm that feels the slightest concussion of our step in season to avoid our destructive approach. The antennæ of many insects, nay, the whiskers of our domestic cat, put to shame man's nicest sense of touch. There is then no sense left

to him in which to excel, but the taste, and it might be thought that the refined palate of our grand gourmands, men who can perceive the peculiar nature of the soils from the flavor of the wine, or of the fish who inhabit the water which they drink, nay, who can perceive not only that the butt of wine has an iron taste from the key which had been lost therein, but that it smacks of leather from the thong to which the key was fastened,—that such palates as these might bear comparison with that of the winged robbers of our cherry and plum orchards, who attack only the sunny side of the fruit, or of that troublesome insect whose taste in cheeses is so exquisite. But what animal besides man swallows liquid fire, and who but he envelopes the organs of taste with the filthy smoke of tobacco, or steepes them in the still more filthy infusion? There is no brute that breathes whose palate would not reject them with loathing and abhorrence. And then in brutes these senses so acute, are guided by an unnerving instinct which distances immeasurably all the boasted refinement of man's reason.

It is not then the superior physical organization of man that elevates him lord of creation. It is his weakness which constitutes his perfection. Look at the young human animal on its entrance into the world, naked, helpless, unfit to be left for a few moments, and inevitably destroyed if the fostering care of others be withdrawn but for a few days. Unable even like the young ape, its hideous representative among brutes, to cling to its parents for protection. The very weight of that brain which by its operations is to elevate its possessor to its destined rank in the scale of being, is too heavy for its strength, and requires the most careful horizontal support. Months must elapse before even the creeping posture can be maintained, and at last after many perils the tottering limbs are able to support the weight of the whole body in that erect posture which is man's noble and peculiar prerogative. Then follow years of helpless infancy, and still more years of immature adolescence, and thus slowly and amid a multitude of necessities and dependence on others, are we brought to the full development of our organs, and are fit to be entrusted with the care of our own support. But it is to this weakness, to these necessities, to this want of preparation for our own support, to this dependence on the fostering care of others during a tardy development, that we are indebted for that which makes us strong and swift,—gives us air and water for our residence, above ground and below ground for our habitation. The flight of eagles is beneath us in the air,

the inhabitants of the mighty deep are distanced in speed by engines fabricated by our skill.

Suppose man's unreasonable complaints to have been heard and his requests granted, and man to have been born as are most animals, strong and robust from his birth, clothed with hair, armed with talons and with teeth, prepared to obtain his food by force, and instructed by instinct. He must forever have remained a brute. It would be manifestly impracticable to subject him to the discipline, the study, the instruction of childhood. Such a being could never be docile, never be restrained within those paths which alone lead to knowledge. The arts of life would not be cultivated. Clothing and shelter which now call forth the utmost ingenuity of man, and which in architecture and machinery have developed the loftiest geniuses, and in painting and design have given birth to the finest products of taste and imagination, would then cease to be objects of interest or forethought.

The beautiful and complex organ, the hand, which while man retains he *must* be master of the world, (would that he had never employed its terrible force but to obtain a legitimate and peaceful empire over brute force, and the powers of nature,) the hand must be sacrificed for the purpose of substituting prehensile organs of more force and stronger armed, whereby to secure his subsistence.

Give man the swiftness of the courser, the lightness and the mobility of the feathered race, and you strike at the root of social order and domestic attachment. He is none too stable in his present estate, but *then* what bonds would restrain him? The petty vexations of life, a paroxysm of anger, a fit of disgust or despondency, and he changes his place to avoid his pain.

"He would roam through the world like a child at a feast,
Who but sips of a sweet, and then flies to the rest,
And when pleasure began to grow dull in the east,
He would order his wings and be off to the west."

There is a principle the neglect of which, lies at the bottom of much of what is erroneous in the systems of modern education. It is that the intelligent principle of our nature is held in connection with physical organs, and that the development of the whole must be equally promoted. Man though an intelligent being, is an *animal*, and like other animals, may be trained by physical culture, from a state of imperfect development, to a high degree of physical energy and perfection.

The subject of physical education is one which has received far less attention from all classes, than the importance and practical nature of the subject demands. It is within the observation of all that our modes of life and external circumstances, modify our health, and that upon our health depends much of our attainment in knowledge. It is thus that the blessings of Providence are equalized. This is a beautiful sentiment which is contained in the answer which the poor aged domestic made to the rich Barmecide, who asked why princes and people of wealth were short lived, while such as he mostly attained old age? "It is," said the old sweep, "because God gives his bounty to them at *once*, but to us by *slow degrees*." The world is filled with instances in which individuals and nations have lost their intellectual superiority and their political freedom, by the degeneracy of their bodily powers. The succession of nature is, that wealth and luxury engender idleness; this produces disease, and disease creates imbecilities both of body and mind, and imbecility is thrust aside by vigor and activity; on the other hand, necessity leads to frugality and temperance, these homely virtues are the parents of health, from health flows the vigorous exercise of the mind and body, and these bear triumphant sway in the moral and physical creation.

These are every day truths, mere common facts, so common I fear, we are prone to overlook them, and although we all desire to remain on the top of this revolving wheel, we are not sufficiently mindful of the means to keep us there. Does the common notion of education in this country, take in a reference to the growth and condition of the body? The influence of external circumstances upon every thing else seems to be better understood than upon children.

Let us draw an analogy from the vegetable kingdom. And here let me ask you to forgive me the humble sources from which I may draw my illustrations; but nature is so true to herself, that our comparisons drawn from the vegetable world, and the brute creation, are consistent with the most enlightened views of the human economy. When trees and shrubs grow languidly—when their stature is small—their bark rough and covered with parasitic plants and animals—their flowers thinly scattered, imperfect and of small size, and their fruit never reaching to maturity, what does the skilful gardener set himself about? He proceeds to modify and improve the physical circumstances in which the vegetable is placed. He clears out the roots, loosens and enriches the soil, clears the epidermis

from dead scales and from animal and vegetable parasites, and probably is at last rewarded by a vigorous and healthy growth. Now let us give our attention to a few facts drawn from stable discipline. Examine an ill conditioned horse—see his hard and unsightly skin closely binding his flesh—his cracked heels—his emaciated, bony appearance—his feebleness—his supplicating, subdued countenance—his awkward and inelegant deportment. Look at the same animal after the well applied labor of the groom, joined to nutritious feeding, have brought him into condition. See how the skin becomes smooth, and sleek, and soft, and pliant—how plump and elastic become the muscles—how the animal acquires flesh, and strength, and spirit, and energy, greater far than he ever attains in his natural condition of existence; how all appearances of disease and debility vanish; and how he becomes master of those wonderful powers which astonish us in the hunter or the race-horse.

From this comparison we may advert to what is witnessed in those men who are trained as prize-fighters, or to perform extraordinary feats of strength or activity. By diet, and exercise, and medicine, and sweating, and friction, and feeding, all regulated by the nice tact and judgment of experience, the body is brought into a state capable of enduring the most extraordinary exertions. We ought not to despise such facts,* homely though they be, we should avail ourselves of them, and be assured that if judicious culture will do so much to elevate and improve the *inferior* beings in creation, the same sagacity will afford the means of advancing the power and energy of him who stands at their head.

The intelligent principle of our natures being held in partnership with physical organs, the development of which controls and modifies this principle, in order for the intellectual part to perform its operation, the physical part must furnish the materials.

And now let me ask the experienced instructors by whom I am surrounded, if this very obvious and simple idea is not too frequently overlooked in our American notions of education? Are we not wont to think that the minds of children may be urged to any extent, without thinking of their bodies, and that it would be deemed almost preposterous to institute tasks for their bodily organs, as we do for those of the mind?

Shall I be permitted to tell you what I think is meant by

* Baron on Tuberculous Disease, page 152—4.

education among us? It means, for the male sex, the acquirement of certain branches of general knowledge, and the principles of those sciences, whatever they may be, which are necessary to the practice of a particular profession; and for the female, an acquaintance with the elements of common everyday learning, and the addition of as much of what is called accomplishment, as the very humble means we have among us will allow, and the sooner and earlier this is done the better.

I do not mean to be severe, nor to accuse either parents or teachers of intentional neglect. There is ambition enough to excel among all parties. But the fault of this education is, it is too partial, it does not develop the faculties in anything like an equal proportion; it is, if you please, too *intellectual*. It produces too rapid a development of the intellectual faculties without waiting for a corresponding growth and corroboration of those organs with which the intellectual faculties are essentially connected; and hence the unnatural excitement of the one exhausts the energy of the other. Sound philosophical education should be *gradual*. One organ should not be tasked at the expense of another, but there should be a reasonable waiting and delay for each to come forward and expand itself. In short, education should be *natural*. Once more let us consult nature in her humbler performances. Does the rose blossom most perfectly when trusted to time under the genial influences of light, and heat, and moisture? or when the impatient florist has rudely torn open the petals of the tender bud? And is it any less ridiculous and absurd to stimulate the minds of the young to a precocious forwardness at the expense of their bodily health and customary hilarity? But nothing demonstrates the imperfection of some parts of our system of education more, than the subjects of it themselves, after they have attained all that was contemplated. In very many instances, there is not health enough left to practise those very accomplishments which it had been the object of their instructors to confer upon them. Look at the pale countenance and slender figure, which too often is seen occupying the sacred desk, and at the debilitated frames of the multitude of aspirants for intellectual renown, whose studies have ruined their health, and the development of whose mental faculties have exhausted their bodily energies, and will open for them an early grave, or worse, condemn them to a premature decrepitude. Of what use in such a feeble casket, are the treasures of knowledge, and how little do the embellishments of mind serve to effect any purpose, but to ren-

der the possessor a more amiable victim to the king of terrors, to weave

"One poor garland
To hang upon his hearse, to droop and wither there."

SCOTT.

But this is fault-finding in general, let me endeavor to be a little more particular.

What a beautiful instrument is the hand, and how readily may it be educated to manipulations which delight and astonish us, while they promote the happiness of the whole human family! And yet how many men of influence and standing are there, who have so neglected the education of this important instrument, that they hardly know what it is made for, except to make a pen, or cut up their food, and who would be just as capable of making a chronometer, as of constructing a box which would hold a hen and let out her chickens. And the eye is, if possible, a still more ingenious apparatus, susceptible of being trained to a delicacy of vision, which will detect the minutest shades of color, and discern distances and proportions of parts, with the accuracy of a mathematical instrument. And yet half the men in the world so neglect the culture of this organ, that they would never discern of themselves that a straight line is the shortest distance between two points, and whose conjectures concerning the height of a mountain, or the width of a river, would be laughably at variance with the truth. And how many men dwell amidst the loveliest scenery in nature, and never discover that the road to market or to 'Change, lies over regions whose lovely or magnificent scenery is calculated to give pleasure to the senses and elevation to the thoughts. And then the voice! How do our hearts yield willing homage to him or her who possesses the soft, persuasive, irresistible, musical tones of a sweet voice!

The skill of the musician can give to the voice all the modulation of a wind instrument with stops, and can even bring a harsh and unmusical one to softness and harmony; and yet, in our day, who dreams of educating the voice for the common purposes of life, of softening its harsh tones, and giving it compass, and energy, and sweetness?

Is it common for any of us to give ourselves much solicitude, when a child is learning to speak, as to his mode of speaking, and when the alphabet is learned, is it common to pay much regard to distinct articulation? We, New-Englanders, are accustomed to pride ourselves upon our correct speaking of Eng-

lish. But surely our national vanity misleads us. There is not a well-educated Englishman who comes among us, who is not at once struck with our indistinct and mumbling articulation, and our want of elegance in pronunciation.

But let us once more revert to principles. It may be stated as a law of the animal economy, that the exercise of an organ is necessary not only to its development and perfection, but even to its preservation. This is often exemplified by the state of parts which are not kept in due activity, for if they are not exercised they degenerate, while by exercise their size and vigor may often be carried beyond the natural degree of perfection. Compare the legs of a foot-soldier, increased beyond their natural size, by his perpetual marchings and counter-marchings, with those of the dragoon, which have become almost useless, and are dwindled to an insignificant appearance, by the want of exercise, and the pressure of the boot and saddle. So the bandaging a limb and laying it at rest, will cause it to diminish, a practice well understood by deceiving mendicants. The fact, then, is sufficiently obvious, that the nutrition and growth of the *muscles*, are promoted by their motion and use. But although not so obvious, this is equally true of the *bones*. The fundamental law is, that inaction creates loss of power and atrophy, or wasting; that every part degenerates unless it continues to perform to a certain degree its peculiar functions. The changes in the muscular system are visible or cognizable to the senses, but those in the bones, are, from their position, necessarily concealed. There are not wanting, however, opportunities of ascertaining these changes, which are familiar to most medical men. As soon as a bone becomes permanently dislocated, the vacated and useless socket becomes filled up, and smoothed to a level with the surrounding bone. If a soldier, in active service, receive a wound for which *immediate* amputation is necessary, or if the same operation be performed on a strong laborer, while he is in full health and exercise, the bone is found nearly as hard and dense as ivory. But let the patient be confined in a hospital, without any motion in the limb, for a number of weeks, and the bone becomes soft and spongy. Medical museums contain many specimens of this change of structure. Perhaps the most remarkable, is the one mentioned by Cheselden, the most eminent surgeon and anatomist of his day. This is the thigh bone of a soldier, who was shot in the right groin at the siege of Gibraltar. He was brought home the next winter and died of a dropsy. After

his death, the thigh bones were sawed lengthwise, with a fine saw, to exhibit the wasted appearance of the internal structure of the injured one; and on weighing them both, the right weighed less than half the weight of the other.

Analogous facts may be observed in animals. It is well known, for example, that the bones of the leg of the race-horse, when he is in full vigor, are as hard as ivory;* and the inferior bone of the foreleg of the lion is so hard and heavy, that with a well-applied blow, he is able to crush the skull or break the back of an animal much larger than himself.

I will now offer you another striking illustration of the principle, that the exercise of organs is necessary to their development, perfection, and preservation.

And I trust I shall not tire you by insisting on this topic, as I desire to fix the principle so incontestibly, that you will permit me therefrom to derive some very important practical inferences.

It sometimes happens, that a bone-setting quack performs a cure upon an injured limb, which has baffled the skill of the scientific surgeon. When this is the case, it is, invariably, by dint of rubbings and manipulations which restore action to parts which have lost the power of action by disease. Although, probably, unacquainted with the principle upon which they are acting, by the labor of rubbing and kneading they bring into operation those laws of the animal economy, and dormant natural powers, upon the performance of which the cure often depends. It is not to be wondered at, if under such circumstances, the patient should praise the *quack* at the expense of the *surgeon*. The operations of the quack are carried on with the parade of ointments and washes, and with the intent to deceive, pretending, by certain manipulations, to put little bones that are out, into their proper places again. But "*fas est ab hoste doceri*," and a valuable lesson upon exercise may be learned from the good effects produced upon contracted ligaments, and emaciated muscles, by the diligent and faithful rubbing of the charlatan.†

Keeping in view the principle which these facts establish, let us advert for a moment to the structure and organization of bone. For it is evident, as the bones form the frame-work of the body, much of the vigor of the constitution will depend upon this frame-work being properly constituted. Bones are

* Shaw on Distortions, page 1—14.

† Shaw on Distortions, page 23, &c.

the levers upon which the muscles act. They are the *organs* of locomotion, as the red flesh, or the muscles, are the *agents* of this motion. You well know that bones contain lime, since the burning or calcining of bones, to make lime, is a manufacture extensively carried on, by which process the animal part of the bone is consumed, and the earthy, incombustible part, remains. Bones are at first formed of a soft, transparent jelly, which is rendered hard by the gradual deposition of lime, in the form of phosphate of lime, a process which is not completed until after the first twenty years of life. In fact, the relative proportion of lime in the bones is never the same, for in advanced age, the increase of it renders the bones brittle, as in infancy, the want of it renders them flexible. So that the application of the same force, which in advanced life would *break* a bone, in the early stage of existence, would only *bend* it.

And the difference between the broken bone of young and old subjects is frequently this, that in the latter case, the fracture is complete, as in glass or pipe-stem, while in the former, it is like the fracture of corn-stalk, or of tenacious wood. Now I have called your attention to these facts, in order to show you how readily, the bones of young and growing subjects, may be moulded by pressure and distorted by the irregular action of muscles, and even deformed by the want of power in those muscles, to preserve them in their proper shape. And in the course of the investigation, we shall see how much the vital organs, the heart and lungs, are made to suffer from the same causes.

The law of the animal economy which we have been considering, and which, we have stated, operates in regard to the bones, as well as the muscles, may be expected to operate very distinctly upon that column of bones, called the spine or backbone. This column is supported, in its erect posture, by various strong muscles, attached to its sides, somewhat as the shrouds of a ship sustain its masts, or as the cords of a tent-pole support it in its upright position. These muscles may be so weakened, by want of exercise, as to become incapable of giving that support which is necessary. When this takes place, the bones of the spine, and the ligaments which bind them together, yield to the superincumbent weight, and this the more readily, from the imperfection in the structure of the bone, to which we have already alluded.

But we will anatomize this subject a little farther. The spine consists of twenty-four blocks, or pieces, decreasing in

size from the base, at the lower part of the back, to the smallest one, which is next the head. These blocks, or pieces, are called *vertebræ*, from the Latin *verto*, to turn, in order to allow of a turning motion, and, at the same time, not to weaken their connexion, they are not placed in contact with each other, but have inserted between each of their opposing surfaces, a very strong and very elastic substance, which enables the whole column of the spine to receive very severe shocks, and extinguishes the force of these shocks before they reach the brain, which is thereby enabled to ride more securely upon the top of the column, than a coach upon pliant springs. Dr. Maclaurin, an old anatomist, was accustomed to illustrate the use of this elastic substance, by comparing it to a bladder partly filled with water, and placed between two trenchers; in which case, the water would readily diminish in bulk, as the circumference of the trenchers became approximated on one side, and would occupy the increasing space on the other. It is a very curious fact, by the way, that since the time of Dr. Maclaurin's conjectural exemplification, an animal has been discovered, the basking shark, in which this structure actually exists. This immense fish has between its *vertebræ*, a bag of water, and so great is the elasticity of the substance by which it is surrounded, that when the bag was cut into, the expansion of this elastic matter projected the fluid to the height of four feet, in a large perpendicular stream, compressing the bag into a small compass, and forcing its sides into numerous wrinkles.* This description readily explains the flexibility of the spine, and the necessity of health and vigor in the muscles, which are destined to preserve it straight and erect. The *vertebræ* are all perforated with a round hole, in order to contain and transmit that portion of the brain, called the spinal cord, or spinal marrow. The uses of this part are very essential, and the disorders which result from its compression, or disease, are very painful and distressing. I think I may now venture to claim your assent to a proposition which I consider of the very first importance in Physical Education. It is this; that the proper growth and perfect development of the trunk of the body, or in common language, a fine shape, is almost uniformly connected with bodily vigor. Those practices, therefore, which injure the shape, should be avoided as much as possible, and those exercises promoted which are calculated to improve it. And here we open at once upon a wide and fruitful field of

* Abernethy's Lectures.

practical ideas, in which we labor long and gather abundance of improvement. Certain positions of the body, when long continued, have a direct tendency to produce distortion of the spinal column. We shall understand better by examining the mode in which the body is supported in standing. This process is effected by *muscular action*. But muscular action, you will say, implies motion. There are two kinds then of muscular action. A bow which is bent and ready for use, is constantly exerting that same kind of spring, or elasticity, which propels the arrow, and yet by the counteracting influence of the two sides of the bow, connected by the string, no motion is produced. So in the human body, when a strong man hurls a stone, some of his muscles are put into violent and rapid contraction. If the same man stand like a soldier at drill, his muscles are likewise contracted to a certain extent, but in a very different manner. The Crotonian Athlete, Milo, is said to have been able to stand on a polished metal shield plentifully covered with grease, so firmly, that no one could push or pull him from his station. I am inclined to think this story the product of Grecian mendacity, but it shows that the Greeks, who understood well every thing which related to exercise, were acquainted with the second kind of muscular action to which I have alluded, and which has been called muscular tone, or tension. The following examples will show what is meant by regulated muscular tension. When a man is going to run a race, he stands prepared at the starting post, and looking earnestly for the signal, which being given, he darts off instantly and loses no time till he arrives at the goal. He has placed himself in a proper position; his muscles were braced up to that degree of tension which practice has taught him to be the one in which they can be instantly used to the best advantage. Two wrestlers or pugilists engage in a contest. They stand up to each other with every muscle, even to those of the eyes put upon the stretch, and ready to use a violent exertion to prostrate each other, and each preserving such an attitude as is best preferred to give or avoid a blow. But, at length, one of them, by the power of the will, calls into action the proper muscles and puts in his blow.

This is positive muscular action, the rest was muscular tension, or preparation to act. The chisel of the sculptor, among the Greeks, was often employed to represent this braced condition of the muscular system, and some of the finest specimens of sculpture extant, are those of gladiators and throwers of the

discus, in a state of preparation for their performances. But while the soldier on the parade is holding himself in his erect and martial attitude, let his commanding officer give the command, "stand at ease," and observe what a change immediately occurs in his attitude. His musket slides to the ground and rests upon his relaxed arm. His body is thrown sideways and rests over one hip. If his back were now examined, it would be found that his spine has a serpentine curve, and that one hip and one shoulder is more prominent than its fellow. Now the former condition is one in which the muscles are to a certain degree exercised, and, of course, is followed by a corresponding degree of fatigue, while, in the latter, the necessary degree of tension is produced by a mechanical arrangement, in which there is little or no volition, and, of course, little or no fatigue. This position, then, by which a temporary distortion of the spine is produced, is the one which those persons assume in standing, whose general or local muscular debility renders exercise or muscular action peculiarly fatiguing. The arch of the foot becomes a fixed point on which the bones of the leg rest, as a firm pillar upon its base. The body being bent sideways at the hip joint, the muscles which go from the hip to the knee are put upon the stretch, so that the thigh becomes fixed upon the leg, and the double curve in the back-bone stretches the dorsal or back muscles of both sides, and the head being a little inclined sideways, is balanced directly over the centre of gravity. Borelli, long ago, explained this in demonstrating the manner in which a bird sits upon a branch when asleep. The weight of the creature and the consequent flexion of the limbs drawing the tendons of the talons so as to make them grasp the branch without muscular effort. Now if you will examine a row of children standing up in a school to repeat their tasks, you will find them nearly all balancing their bodies upon their foot, after the manner I have mentioned. As a natural consequence of this position, there is a slight curve in the whole spine, and although the muscles of the more robust soon learn to balance each other again, in the debilitated and feeble, this position long continued may lead to more permanent deformity. It is easy to understand why girls are more subject to this deformity than boys, since they have much fewer opportunities of counteracting these causes of deformity by the active exercises in which boys indulge. How very remarkable is this fact and how much valuable instruction does it convey, that lateral curvature of the spine is a disease of the very rarest occurrence among

boys, and is distressingly frequent with girls. If a weakly girl of ten years old be obliged to sit for hours on a narrow bench, without any support to her back, she will inevitably suffer her body to sink down upon one side into the attitude of ease we have been describing. If, besides that, she is placed in a situation in sewing, writing or drawing, to favor the same curvature, and if in addition she be prevented from taking such exercises as tend to give tone and strength to the muscles of the spine, it would be wonderful indeed if she escape being crooked. But the *spine* cannot change its shape, especially the superior part of it, without a corresponding change in the form of the ribs and breast bone, and a consequent interference with the functions of the heart and lungs. One part of the circumference of an elastic hoop cannot be bent without a corresponding alteration of shape in its opposite arc. Each pair of ribs with its attached portion of spine and breast-bone constitute an oval, subject to the same laws as the elastic hoop. Thus, if the right shoulder become *prominent* from curvature of the spine, the left ribs are flattened in front. Where this deformity of the chest has taken place to a degree sufficient to diminish materially the room required for the movements of the heart and lungs, very serious injury of the health is produced. I remember to have found in the case of one person who had passed a miserable existence from this cause, that the heart had received a deep furrow or indentation from the constant pressure of the sixth rib. The usual position of the body in writing or drawing, has a direct tendency to aid this deformity. And in very weakly subjects the position of the body while asleep may also conduce to it. There are some of the sports of children likewise, in which one hand and arm only are exercised, which have a tendency to pull the spinal column to that side. Immediate attention therefore, should be paid to the commencement of this difficulty in young and slender persons. It is no part of my plan to talk about the medical treatment of cases of distorted spine. Let it suffice to state generally, that since the deformity is produced by muscular weakness and irregular action, the muscular system should be brought, as speedily as may be, to a sound and healthy state of action. And this is to be done by those exercises which call into play the various muscles of the body.

I shall trespass on your patience with a few remarks on particular exercises. The refinement of the manners of society, has not always produced a favorable effect upon these exercises. The predominant wish of all classes is to live without labor.

The female sex especially, suffer from the influence of those customs which seclude them from exercise in the open air, and condemn them to the sedentary occupations of the needle and the lace frame. I am almost disposed to acquiesce in the petulant injunction of a fault-finding commentator upon present fashions, that we cannot make too much of our old women, for we never shall have any more of them.

Labor-saving machinery which now does so much to impart to our convenience, has extinguished some of those active employments which conduced to the health of females. The spinning wheel, a knowledge of the use of which used to be considered indispensable to every thrifty housewife, is now very generally laid aside. This implement was an admirable fortifier of the muscles. It gave simultaneous employment to both arms, to the lower extremities, and to the muscles of the chest. Cobbett, in his *Cottage Economy*, goes into raptures in the description of a tidy house-maid, baking bread. Had he lived in New England in the days of the spinning-wheel, I think he would gladly have exchanged the picture, for that of a smart farmer's daughter, spinning her winter stock of knitting yarn. In those days, it was no uncommon thing to see a young woman, with a spine as straight as Diana's, even though her parents were rich enough to afford that she should be as crooked as the last letter of the alphabet. It is easier to prevent deformity than to cure it. The plan of exercise therefore, should be adopted in very early infancy. In general, the vivacity and hilarity of very young children, is sufficient to keep them constantly in motion, and changing their position. This is sufficient, and all attempts to restrain them and reduce them to quietude, for our convenience, should be avoided. But their misfortunes are too apt to commence from the moment they begin to go to school, and this is often at a very tender age. It is certainly no uncommon thing to see twenty children, under six years of age, shut up in a room less than fifteen feet square, well warmed with a stove, and furnished with narrow benches without the least support for the back. Here, when the natural mobility of their system prompts them to vary their position every minute, they are chid for not sitting still, and those who from languor or debility, are enabled to conform to orders, are commended for their obedience. Every school-room for young children, should be large and airy, and furnished with such conveniences for sitting and reclining, as may prevent their falling into constrained and fatiguing postures. Their position also should be varied by some employment, at

least as often as every five minutes. With children of all ages, the practice of balancing the body always upon one limb during recitations, should be watched over, and they should be made to change their posture by word of command.

The infant school system, is certainly founded on a correct view of the animal economy.

This system is so emphatically that of common sense, that I cannot doubt but that in a few years the best parts of it will be introduced into all the schools for little children. Let the small, heated, ill-ventilated rooms, the uncomfortable seats, and the constrained positions in these schools, be relinquished in favor of activity and motion, and free circulation of air, and the natural dread which children have of imprisonment in going to school, will yield to joyful anticipations of pleasure. Two things seem to me to be essential to the health of small children in the arrangement of their schools. A pleasant play-ground in the open air, and a well protected building for exercise in the winter and in rainy weather.

As children advance in age, their exercises must have more plan and arrangement, and their sports become systematic games. Cricket is an unrivalled game among boys for the exercise of the limbs and body. Swimming deservedly ranks high as an exercise. Besides the invigorating effects of the cold bath; in swimming, every muscle of the body is called into action. It was possibly owing to his fondness for this exercise, that Lord Byron was to combat successfully, for so long a time, with the destructive effects of his gin-and-water mode of life. A swimming school, where it could be obtained, would deserve the patronage of every parent and instructor of boys. Skating likewise, is a fine exercise of the limbs, and in some countries helps to brace the muscles and freshen the complexion of girls as well as boys. But in this country, as fashion, who is supreme arbitress in such matters, has decreed that skating is not a proper amusement for girls, they must rest content with sliding.

Battledoor, and the variations of this game which modern ingenuity has contrived, is a pleasant and useful exercise for ladies, but it is hardly exercise enough for those who are in health; and when the game is followed, by using only one hand and arm, I am inclined to think its tendency is bad for a spine inclined to curvature. There is no amusement which could be contrived, better suited to improve the shape of delicate females, by calling into action all the muscles of the back, than the game of billiards. But this game has unfortunately come into bad repute, from being

the game resorted to by profligate men of pleasure, to destroy each other's health, and pick each other's pockets. Fencing as an exercise for young men, has fallen into very undeserved neglect, and might be usefully revived amongst us, as an antidote to the dispeptic misfortunes of modern dandies.

It will doubtless be expected that I should have an opinion upon the subject of Gymnastics, which have lately become fashionable amongst us. But it would require much more time than now remains to me, to recount all that may be said, for or against these exercises. They certainly are not, what their name professes to be, a revival of the practice of the ancient Greeks. Some of the French writers, have adopted the name of Somasceutics, from the Greek word *σomasceue* to exercise; this is a much more appropriate title, and at least, does not mislead us. It is an error to suppose that great flexibility of the limbs, such as may be acquired by stretching the ligaments in unnatural postures, is a desirable acquisition, and it seems to me this error has been embraced by some teachers of gymnastics.

The truth is, that the exercises by which ropedancers, posture-masters, and tumblers acquire their astonishing powers, do not conduce to permanent muscular strength. Such people, if their history is followed to their old age, will be found to be feeble and prematurely decrepid. A tumbling boy has been known who could stand erect, and then gradually bend his head backward, till it passed between his legs, and looked the spectators full in the face, while he was in that situation; he would then gradually return himself to his erect position.

To enable a boy to perform such feats, he must for a long time have been exercised in such a way as to stretch and lengthen the ligaments of the spinal column, and the injury thus produced, would more than counterbalance any good derived from increased strength, in the muscles. A late writer has traced the history of several of the buffo or pantomime performers of the London stage, to their decline of life. Delphini was a native of Venice, a gondolier. These people during the carnival and on other occasions, employ themselves in practising feats of activity and strength, to amuse themselves and their countrymen. Delphini became so eminent in these pursuits that he relinquished his gondola, and betook himself to the stage in London, and became the most eminent performer of his day. At the age of forty he is described as having become so debilitated he could scarcely place one foot before the other; and although he lived to his ninety-ninth year, a proof of the natural strength of his

constitution, he had, for half a century, the appearance of being in the last stage of existence. Grimaldi was another of these actors, celebrated at Drury Lane and other theatres. He had a frame that was like the body of Hercules, and strength that was equal to it, besides more activity than any other performer of the same description that existed in his time. A few years ago he quitted the stage, in consequence of being rendered incapable of following his occupation. The Times newspaper gives his farewell address, in which he states that eight and forty years had not then passed over his head, and yet that sickness and infirmity had come upon him, and that he found himself sinking into a premature decline, and was then not able to stand so well on his legs as he formerly had been upon his head. He supposed that he was paying the penalty of the course he had pursued all his life; that his desire and anxiety to excel in his calling, had excited him to more exertion than his constitution would bear, and like vaulting ambition he had overleaped himself.* "The premature termination of the professional career of two men, who were eminent in their department, may be taken as an exemplification of some of the injuries which result from overstrained and unnatural exertions made by young subjects, with a view to acquire extraordinary flexibility of limbs. And wherever gymnastic exercises are founded upon such practices, they are unhesitatingly to be condemned. No such injurious exercises were practised in the gymnasia of the Greeks. Their object was to train men for war; and the custom was to make every male native of all the nations of Greece, acquainted with the use of arms, and every exercise that was connected with military pursuits." "In order to do this, at the gymnasia established in every city, all the exercises that could be useful were taught, and the study was followed with so much earnestness, that children were led to them as soon as they could walk; they were then taught such gentle exercises as were adapted to their tender years; as they advanced in life, their exercises were increased in power, and as they approached to manhood, raised to the full height to which the active powers of man could be carried; till they entered into active life fully qualified to perform whatever task was assigned to them. Prizes for competition were also established, and hence the Olympic and other games, in which children of eight or ten years of age contended. The festivals at which these games

* See M. Sheldrake's remarks on gymnastics, in the Lancet, vol. 1. 1823-9. page 333-4. et seq.

were practised, were so frequent, that the expertness of the gymnasts was never lost, and the Greeks became an active and warlike people. But it cannot be conjectured they would ever have obtained this character, by practising the monkey-tricks which, with some persons, pass for healthful exercises. The Greeks were religious, as well as warlike, and the dancers of their solemn festivals were as much the delight and ambition of the females, as contending for prizes at the Olympic games was of the males. In the opinion of the best writers on health, dancing is an exercise well calculated to give elasticity, strength, and firmness to the female form, and it was no doubt owing to this cause, in a great measure, that there were so many faultless models of female form, to be found among the Grecian females. These dances were a part of their religion which consisted in festivals of honor to their different divinities, in sacrifices, and in processions to the temple where these sacrifices were performed. In these processions all well-born Grecian females bore a distinguished part, and the honor of bearing a leading part was competed for with the greatest energy. To acquire excellence in this art the young females attended the gymnasia, where they were taught with as much anxiety, and as much constancy, as the males who attended, to acquire a knowledge of their military exercises; and the consequence was, that each sex attained perfection in its own peculiar exercises. The females practised their dances with great diligence, because the frequent recurrence of the festivals occasioned a frequent selection of the most beautiful and accomplished to bear a part in the processions, and thus a stimulus of the strongest kind, was constantly applied to their minds. And as all this was connected with their religion, with that feeling of love and adoration, which has its favored residence in the female breast, the effect in producing attention to these exercises, and the acquirement of skill in them, was far beyond any thing which at this time we can conceive of. Besides the great festivals of the Olympic, the Nemean, the Istrian, and the Pythian games, a desire to attend which was common to all the inhabitants of Greece, each city had lesser festivals of its own in which the same practices were followed, with a degree of the same zeal and energy." "There was a gymnasium in each city, in which the same exercises were taught with care and constancy."

"Attention to these exercises, was an important portion of the business of every person's life; first as a pupil to learn; next as an adept to practice; and in the end, as a spectator, interested in the success of the rising generation, and enjoying in *their suc-*

cess the memory of former exploits. And with all this, their religion, such as it was, was connected." Thus was an universal passion for gymnastics excited, and such an effect produced, as renders the application of the term to our supposed imitation of them, almost ludicrous.

In commending dancing as an exercise for females, I shall not be understood to mean dissipation. Dancing has no necessary connexion with late hours, dangerous change of dress, or improper food. And when pursued as a recreation for the young, it should be most studiously separated from all these excesses. The French, as is well known, are passionately fond of dancing, and they commence their preparatory exercises almost as early, and with some of the same zeal, as did the ancient Greeks. And as the practice is universal, from the duchess, and the leader of ton, to the chambermaid, and the peasant girl, the result is, that the French women excel those of the other European nations, in the lightness and symmetry of their forms, and especially in preserving their vivacity and agility to an extreme old age. Dancing is likewise so common an amusement among the French, that it more rarely leads to excess and dissipation, than among the northern nations.

With the French, dancing is not confined exclusively to the ball-room, and heated apartments. It is apropos to every thing, both in the parlor, and in the hall, in the public gardens and promenades, and by the road-side, wherever a fiddle can be heard. The argument to be drawn from the termination of the professional career of the French professional dancers, is entirely the opposite of that to which we just now alluded, in the examination of the exercises of tumblers and rope-dancers. Some of these performers have lived to very advanced age in possession of great health and activity. The wife of the celebrated Garrick was a stage dancer, educated in the French school, of high reputation. She enjoyed perfect health to the last day of her life, and died suddenly in her ninety-ninth year. The dancing of the Italian opera, of which some disgusting specimens have been exhibited in this country, is only a modification of tumbling and posture-making, and has been found to exert the same debilitating effect upon the joints and frame. It is said by those who are good judges of the matter, that the old fashioned, stately, French minuet, is, of all dances, the best calculated to give grace and elegance to the female form.

There is one other pursuit congenial to the health, and improving to the form of females, which is far too much neglected

by them. I mean the cultivation of the garden. I know of nothing better calculated to give strength and pliability to the form, than the common business of horticulture. I cannot help suspecting, from the description of the heroine of Scott's most beautiful, or at least most popular poem, that she was addicted to gardening, or at least to botanizing.

"What though the sun with ardent frown,
Had slightly ting'd her cheek with brown,
A form more light, a step more true
Ne'er from the heath flower dash'd the dew."

In our zeal to train the physical and mental faculties, we must not lose sight of another principle, the connexion of which with moral and physical health is intimate and extensive. It is that the unnatural excitement of organs is invariably followed by corresponding depression and debility. Education is too apt to be hurried. In our impatience to arrive at results, we are prone to stimulate the young to undue exertions. It is not the *amount of knowledge* which is obtained at school, which constitutes *education*, but the mental and bodily discipline, the habits of attention and study, the *ability* to acquire knowledge.

The great doctrines of temperance all hinge upon the principle we have just stated, and children should be thoroughly instructed, that a reckoning will surely come, by which an ample forfeit will be paid for every excessive indulgence. In educating our children with reference to this principle, we are doing much to enable them to escape from the dominion of appetite, and what a feeling of independence does this security bring with it! The attention of some philosophical minds has lately been directed to the subject of diet, and some experiments upon a large scale, have proved that a diet of the simplest and least expensive materials may be adopted by young men who are pursuing their studies, and with the best effect upon health. Much of the disability which young men of slender pecuniary means labor under in the acquisition of knowledge, arises from the supposed necessity of paying three or four dollars a week for board. How much independence is acquired by a young man's ascertaining practically, that he can live in perfect health upon simple water and the plainest vegetable food. And what cannot a man accomplish who has youth, and health, and independence?

To make the exercise of the bodily organs conducive to health, this exercise must be habitual. It is difficult to make those who are suffering from a languid circulating, and a debilitated muscu-

lar system, realize this simple truth. In taking up a prejudice against exercise from the ill effect of single, ill-judged efforts, causing fatigue and exhaustion, they reason like the honest Hibernian, who, having heard of a feather-bed, thought he would first try a feather betwixt him and the floor, and exclaimed, as he stretched his aching limbs, "if a single feather is so hard, what must a whole bag full be?"

Habitual labor, not temporary exertion, invigorates the system, and renders the laboring man unsusceptible to the impression of ordinary hurtful circumstances. I cannot think, therefore, that we are to gain much by the use of gymnastic exercises, in the way they are commonly managed.

In conclusion, let me recapitulate some of those principles which I deem important to be kept before the minds of teachers and parents in training the young to their allotted stations in life.

1. That man being at his birth the most imperfect of all creatures, is the most susceptible of being modified by education, and most dependent upon it.

2. That he is to be educated with reference to physical development, in connexion with the expansion of his intellectual faculties and moral sentiments. That this development, both of mind and body is naturally slow, and is to be waited for; and education must, therefore, be a slow and gradual process in order to be a faithful one.

3. That the inaction or disease of bodily organs results in their loss of power and capacity to perform effectually their functions.

4. That the unnatural excitement of the powers of organs is followed by a corresponding depression and exhaustion of these powers.

5. That the exercise of these powers, to be useful in inducing health and vigor, must be habitual and continued.

In the very slight sketch I have now offered, it will be seen how numerous are the topics to which the discussion of our subject will lead us, and however trivial some of them may appear, they are all of them important in their effect upon the health and welfare of the community. A sound mind in a sound body is the perfection of human existence, and the business of instruction can never be properly carried on, without keeping constantly in view, that these two different portions of our fabric must be educated together. We certainly live in a community where juster notions are beginning to prevail. The profession of teaching has be-

come an honorable, and, I hope, a profitable employment. The responsibilities of teachers are more and more realized. They do not, to be sure, make or administer the laws of the State, they do not watch over the pecuniary interests of society, but to them is committed a far more weighty and precious charge. In their hands is placed the destiny and the happiness of future generations; the prosperity and welfare of the State.

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